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ABSTRACT

The Environmental Protection Agency's (EPA) inhouse library systems fall into two principle categories: basic library inventory systems and literature retrieval systems. Currently, the library network supports three inventory systems: the journal system; the hard bound book system; and the circulation system. At the same time, five efforts are under way in the area of literature retrieval: (1) a system involving bibliographic information concerned with the health aspects of pesticides; (2) a similar application in the area of air pollutants and their effects on vegetation and animals; (3) a system covering a collection of international environmental reports pertaining to national environmental policies and laws; (4) an EPA reports system using master files provided by the National Information Service (Department of Commerce); and (5) an EPA document control system which monitors documents not covered by other library applications. Each of these systems generates comprehensive computer outputs meeting the total needs of the data managers as well as the daily user. (WCM)

**A DESCRIPTION OF THE ENVIRONMENTAL
PROTECTION AGENCY'S IN-HOUSE
LIBRARY SYSTEMS**

February 1974

**LIBRARY SYSTEMS BRANCH
MANAGEMENT AND ORGANIZATION DIVISION
MANAGEMENT INFORMATION AND
DATA SYSTEMS DIVISION
OFFICE OF PLANNING AND MANAGEMENT**

**U. S. ENVIRONMENTAL PROTECTION AGENCY
Washington, D.C., 20460**

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IN-HOUSE LIBRARY SYSTEMS

February 1974

Library Systems Branch
Management and Organization Division
Management Information and
Data Systems Division
Office of Planning and Management

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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A Description of the Environmental Protection Agency's Inhouse
Library Systems

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Purpose and Scope

EPA's inhouse library systems fall into two principle categories: basic library inventory systems and literature retrieval systems.

The Inventory Applications

Currently, the library network supports three inventory systems: the journal system; the hard bound book system; and the circulation system. The journal and book systems are national in scope and serve the agency in the following ways:

1. The systems facilitate intelligent and efficient ordering. With the knowledge of the total inventory, the librarian can determine what additional journals and books should be ordered to stock the library properly in each of the environmental subject areas. Also, by reviewing the inventories of nearby EPA libraries, the librarian can determine if the journal or book should be ordered or borrowed from another EPA library.
2. These inventory applications provide for better utilization of library space. Libraries in a given region can coordinate inventories so that unnecessary duplication of holdings does not occur.
3. The systems assist the users of the library. By presenting complete and concise inventory documents, the users are able to obtain a better understanding of the vast information available in the total library network.

The third inhouse inventory application is the circulation system. This system is local in nature in that it services individual EPA libraries. Currently, this application is being used in various EPA libraries including the Washington D.C. library, the National Environmental Research Center libraries in Cincinnati, Ohio, and Research Triangle Park, North Carolina, and regional libraries in Seattle and Chicago. This system will be extended for use to any library requesting it. It provides the librarian with the ability to monitor all aspects of library material on loan.

Literature Retrieval Systems

At this time, five efforts are under way in the area of literature retrieval:

1. A system involving bibliographic information concerned with the health aspects of pesticides,
2. A similar application in the area of air pollutants and their effects on vegetation and animals,

3. A system covering a collection of international environmental reports pertaining to national environmental policies and laws,
4. An EPA reports system using master files provided by the National Technical Information Service (Department of Commerce), and
5. An EPA document control system which monitors documents not covered by other library applications. A major component of this collection is the vast environmental state and local report collection held by the EPA library system.

Each of these systems generates comprehensive computer outputs meeting the total needs of the data managers as well as the daily user.

Following is a summary description of the computer hardware and computer software used in the development and maintenance of each of the systems:

The Computer Hardware

All of the inhouse library systems utilize the National Institutes of Health's computer facility located in Bethesda, Maryland. This facility is one of the world's largest biomedical research computer centers.

The library systems have been developed and maintained on NIH's two IBM 370/165's. In addition to providing an extensive on-site computing facility to the many users, this center supports a comprehensive remote job entry and telecommunication capability. Through this capability, users in all parts of the country can communicate with the central computer center and perform all operations as if they were on-site. A large number of EPA's regional offices and National Environmental Research Centers are linked to NIH. To give the reader an idea of the capacity of this center, in April 1972 the center handled more than 125,000 jobs including 30,000 low speed communicating terminal sessions. In June, 1972, the second IBM 370/165 was installed. This computer has three million bytes of storage and the ability to perform over twelve and a half million computations per second. (1) The facility can support over two hundred low speed communicating terminal users simultaneously.

The Computer Software

Wylbur--This is a computer program which serves as a text editor and remote job entry facility. Developed by the Stanford University Computation Center, Wylbur has been adapted for use at the NIH computer facility. This program allows a user to communicate on-line (via a low speed communicating terminal) with the central computer and to perform a comprehensive text editing function without interfering with other jobs being processed by the computer. Using Wylbur, one can create, modify, store and retrieve text. This text can take the form of a computer program, a data master file, or even a business letter. (2) All of the computer programs, system documentation, and many of the library systems' master files are built and maintained through Wylbur. This documentation package was fully developed and edited using Wylbur. As comprehensive as this text editor is, it has been easily learned and extensively used by people with no data processing experience.

The Inquiry And Reporting System (IRS)--This is a commercially available data retrieval and report generation software package. It provides

(1) INTERFACE, (No. 34; Bethesda, Maryland: The Computer Center, Division of Computer Research Technology, National Institutes of Health, June 5, 1972), pp.

(2) WYLBUR REFERENCE MANUAL, (Bethesda, Maryland: The Computer Center, Division of Computer Research Technology, National Institutes of Health, December, 1970), p.3.

a fast, efficient, and simple technique for extracting information from computer files, performing basic data processing functions, and producing the desired form of output. (3) All of the computer programs in each of the library systems has been written in this computer language.

(3) INQUIRY AND REPORTING SYSTEM USER'S GUIDE, (Bethesda, Maryland: Sigma Data Computing Corporation, 1968), p.1.

The library application's initial development began nearly thirty months ago. Over time a basic system design approach has developed and some of the major aspects and considerations of the approach are presented at this juncture.

As described, the inhouse library systems involve two broad areas: library inventory systems and literature retrieval systems. In developing systems in these areas, standards of development have been established. This includes master file organization, basic computer programming techniques, alternative methods of input development and control, primary computer outputs, and so forth. The basic premise is to apply standards that have been used successfully in one area to other similar areas. An example of this approach is the agency's pesticides and air pollution systems. The pesticides system was developed first. The same primary standards were applied to the air pollution system. One of the favorable results was that the development time and costs of the air pollution system were 25% less than those of the comparable pesticides system. Another important result of using similar approaches is the reduction of training costs associated with understanding any phase of the two systems. A data preparation clerk for one system can easily learn the procedures for the other. A researcher who understands the outputs of one can quickly learn how to use the outputs of the other. In every way, learning about one of the systems helps lay the foundation for learning about the other.

A second consideration is to make available to other libraries systems that have worked for an individual library. The circulation system is an example of this approach. This system was developed for the Headquarter's library. Recently, it has been implemented in five other EPA libraries that can justify its need.

A third consideration of the system's approach is that in the development of each system the first technical procedure (following a thorough discussion of the application by the technical and functional parties) is that of establishing a working system based on a small test data base. As this test system develops the technical and functional parties work closely together insuring that the final result meets the total need. When the small test system is completed all concerned can be reasonably certain that the system will function as intended. The critical consideration is that a small test system is developed, analyzed, modified, and completed prior to the commitment of any large resource to the effort. As a result of this procedure, none of the established systems have undergone major modifications beyond the test phase.

Another important aspect of this system's approach involves the planned, effective utilization of the powerful hardware/software environment employed by these systems. The use of the on-line capabilities in each application is well planned. While small scale on-line monthly updating is used extensively, the larger initial data bases have been provided in machine readable form by contractors using conventional off-line data preparation methods. In all but the circulation system, the master files are maintained off-line on magnetic tape. Whenever practical, computer processing is accomplished during the lowest priority of computer job class. This can mean a savings of 25% over what higher unnecessary job priorities would cost. The proper use of the computer environment is essential if any system is to be cost effective.

in any computer based system, an accurate and current data base is essential if a library application is to prove successful. In achieving such a data base, the proper use of input forms is crucial to the system. Generally, the greater the number of decentralized sources of input, the more rigid and defined the input forms and procedures must be. In our book system, approximately twenty-eight libraries from around the country submit input forms daily. The input form is well structured, and complete instructions to the participating libraries are provided. On the other hand, the circulation system serves an individual library. The input forms and controls are somewhat less rigid as all aspects of the system are managed by one individual in each library. Another important consideration is to design the input forms as closely as possible to the actual master file format. This will keep input costs as reasonable as possible.

Certainly one of the most important considerations in the design of any of the library applications is that the users' needs are satisfied. Each of the systems is designed to provide a complete set of documents presenting the data in the required formats. In the literature search applications, reports meeting refined search requirements can be generated. In all the systems, any report can be available within twenty-four hours of the request. The systems are designed to allow the user to be computer independent with the reports providing all of the necessary information. They are designed in this manner to allow for users without terminals to benefit from the systems. A further consideration is that all basic information is available if the computer is down. When necessary, the user is provided assistance by trained people who can efficiently access the systems. This not only insures that the user will be well served, but keeps system operation costs to a minimum.

In the initial design stage of user oriented systems, a primary step is to outline the necessary information report outputs. Once this is defined, the remaining elements of the system, such as file formats, input procedures, data element specifications are designed. An important point is to keep the input layouts and file formats as close in design to the principle output formats as possible. This will greatly reduce computer programming and system operation costs as well as enhance the ability of a user to comprehend the system.

A final consideration in our design approach is the desire to make full use of data bases that are not initiated and maintained inhouse. The EPA Reports System (reports submitted to NTIS) and the International Environmental Reports System are examples of this approach. In both cases the data bases are prepared by other organizations. The necessary software is developed inhouse that allows for the generation of the required information reports.

Each of the considerations described above has contributed significantly to the effective development of these systems. However, the crucial consideration necessary for the success of any system is functional people who truly understand their subject areas and their customers' needs. Without the active participation of such people, it is unlikely that any system will succeed.

Application of COM (Computer Output on Microform) in the Library Systems

One of the most significant features of these systems is that most of the reports are available on COM (Computer Output on Microform). This allows for wide distribution of any output at a very small cost. The NIH Computer Center provides output on microfiche or microfilm in the form of an on-line Datagraphix 4400 Business Graphics Recorder.⁽⁴⁾ To date, the library applications have used only the microfiche feature of this equipment. The microfiche has a reduction ratio of 42X. In real terms, one microfiche contains the equivalent of over 200 pages of hard copy constituting nearly 12,000 lines of print.

One of the principle reasons for the use of COM is in a situation where many copies of a structured computer generated information report are desired. The original COM costs little more than hard copy to generate. From the original, one can generate any number of copies for pennies. EPA's inhouse copies cost about four cents per microfiche. COM plays an important part in EPA's library systems because several of the reports are widely distributed both domestically and internationally. Without the microfiche medium, such distribution would be too costly for EPA to undertake.

In addition to being an inexpensive means for distributing information, in many instances, COM represents the most practical presentation of large amounts of data widely desired. Large reports not only are impractical to store but are impractical to use. One of the systems' subject indexes creates a report of 60,000 records equal to 4,000 pages or 240,000 lines of print. On microfiche, it was presented on twenty indexed microfiche less than one half inch thick.

In an area such as environmental information, complete data bases are desired by universities, foreign countries, corporations, and public groups. Mailing of large expensive reports is impossible. Domestically, one can mail five microfiche for the price of first class letter postage.

There are numerous on-line interactive computer efforts operating in the information area. The day when unlimited, on-line access to any data base is available is still some time away. Microfiche is not computer bound. It is not necessary to have access to a communicating terminal, a telephone, or a computer to use microfiche. All that is necessary to use microfiche is a reader costing approximately one hundred and fifty dollars, less than one month's rental on many communicating terminals.

A further consideration in the use of microfiche is the paper shortage. As the paper shortage continues, the necessity for a reasonable alternative will increase. The day may not be too far off when the seven inch computer listing is an expensive, impractical item of the past. COM represents one practical alternative.

COM is a very useful form of computer output. The EPA library systems have made extensive use of COM simply because with proper training, the ultimate users of these systems find COM an acceptable, inexpensive means of satisfying their information need.

⁽⁴⁾ COMPUTER CENTER USER'S GUIDE, (Bethesda, Maryland: The Computer Center, Division of Computer Research Technology, National Institutes of Health), p. 251.

JOURNAL HOLDINGS INVENTORY SYSTEM

Below is a brief description of each of the inhouse library systems. Comparisons of systems' costs, development time, and so forth are presented in a table at the end of this documentation. In order to interpret properly the information in the table, a thorough understanding of the system description is necessary.

The Journal Holdings Inventory System

Purpose and Scope

This system gathers data on the journal holdings of all participating EPA libraries and generates a journal holdings document reflecting the inventory at any given time. In addition to generating a total EPA holdings report, an individual holdings report by library is produced. All libraries receive copies of the total journal holdings report as well as the report reflecting just the particular library's holdings. All other interested areas receive a copy of the total journal holdings report. An updated edition is generated once a year.

Data Elements

Journal titles are maintained on a title file which also contains the International Standard Serial Number. All holding information is maintained on a holdings file. Each record on the holdings file contains the library identification and the basic holding information--volume and year. The files are linked together by a journal identification number which appears on both files. The system is designed in this manner so that once a title is entered, only a holding entry is required to identify the same journal in a new library. Document #2 (page 11) is a sample file format.

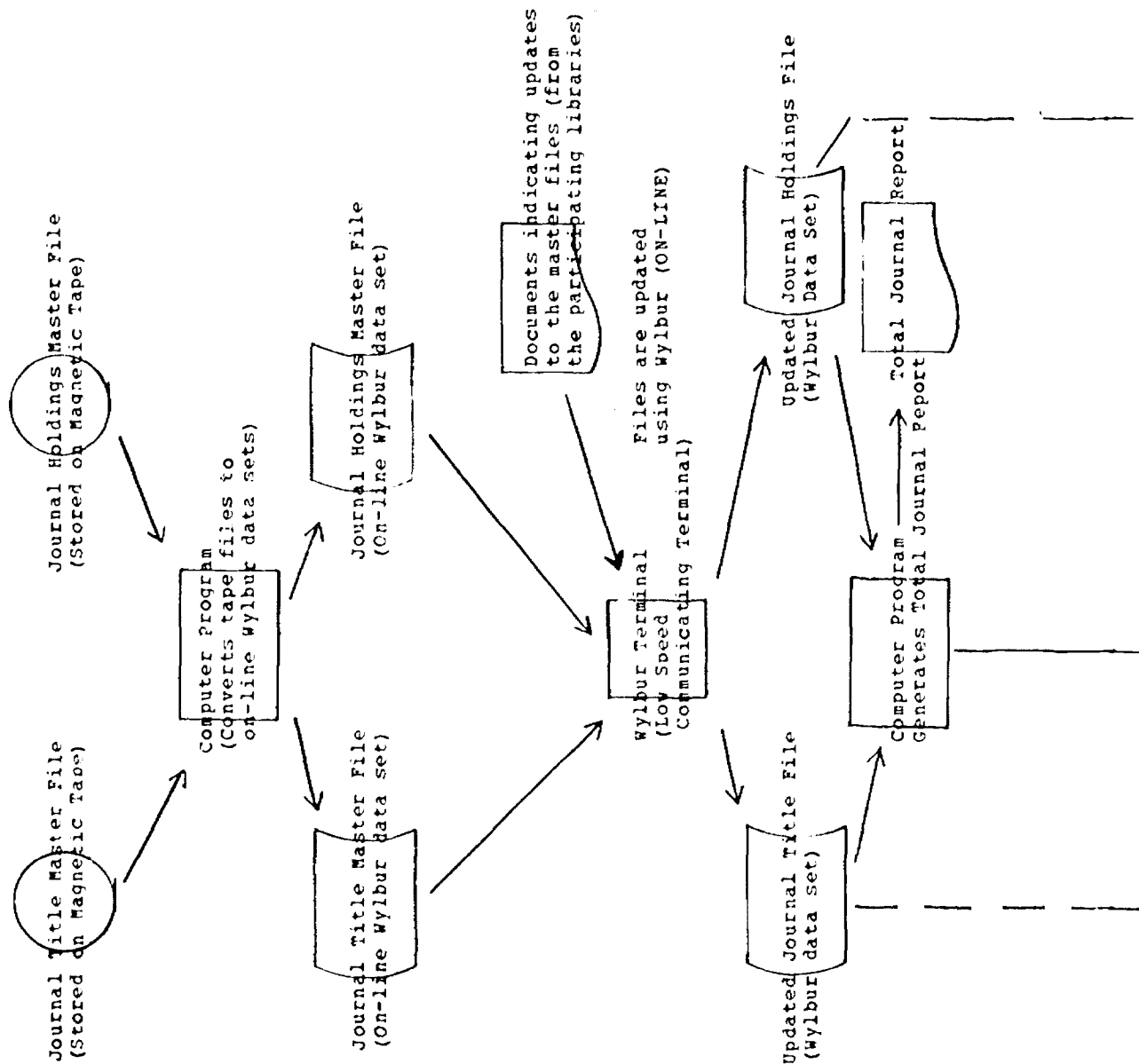
Status

All of the computer programs are operational. The data base is complete. The system contains nearly 2500 titles and nearly 6000 holding entries. The second edition of the principle report has been printed. The cost of computer program execution of the primary journal inventory document (second edition) was under \$16.00. A special computer program which generates all twenty-eight individual library holding reports was executed at an average cost of under \$.60 per library. The reports were also generated on microfiche. In July, 1973, the International Standard Serial Number was added to the majority of the journal titles.

Plans

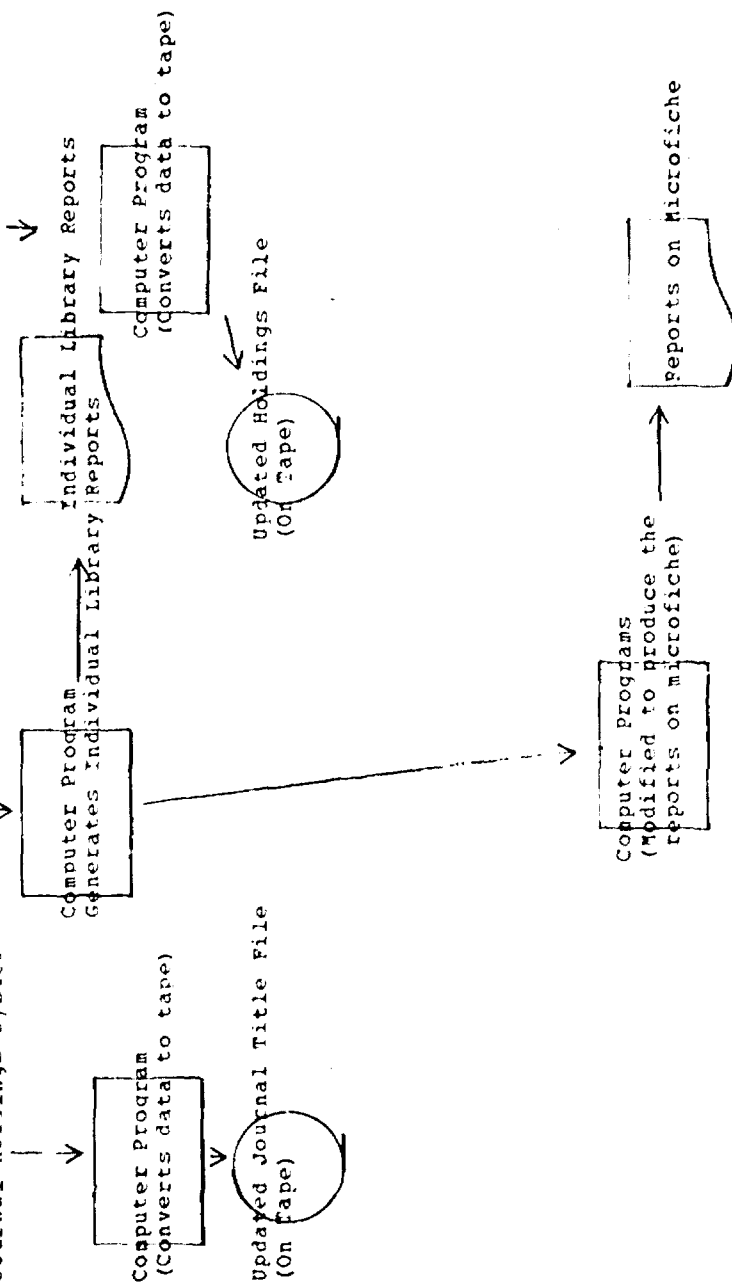
The ability to assign multiple subjects to the journal titles and generate journal title reports by subject has been accomplished in a test environment. In addition, the programming to support a journal check-in system has been completed in a test environment.

Document #1 (pages 9-10) is a brief system flow.
Document #3 (pages 12-13) is a sample of the total inventory report.
Document #4 (pages 14-15) is a sample of the individual library report.



Document #1 Continued
Journal Holdings System

System Flow



Document #2
Journal Holdings System
Sample Master File Layouts

Journal Title File

Journal Title	ISSN	Journal ID Number
↓	↓	↓
AAPSE NEWSLETTER		000050
ABRIDGED INDEX MEDICUS		000100
ABST OF AIR AND WATER CONSERVATION LITERATURE	0001-3331	000200
ABST OF DWR PUBLICATIONS. (CALIFORNIA DEPT. OF WATER RESOURCES)		000300
ABST OF ENTOMOLOGY		000400
ABST OF LITERATURE ON THE BIOLOGICAL AND RELATED ASPECTS OF LEAD	0001-3579	000500
ABST OF MYCOLOGY		000600
ABST OF NORTH AMER GEOLOGY		000700

Journal Holdings File

Journal ID Number	Beginning Volume and Date	Ending Volume and Date
↓	↓	↓
Library ID		
00005005A	003 (1972) - TO PRESENT *	
00010004E	002 (1971) - TO PRESENT	
00020004B	001 (1969) - TO PRESENT	
00020004M	001 (1970) - TO PRESENT	
00030003B	001 (1967) - 002 (1968)	
00040005B	002 (1971) - TO PRESENT	
00050004B	001 (1965) - TO PRESENT	
00060004J	001 (1967) - 004 (1970)	
00070002B	(1966) - (1971)	
00070005B	(1966) - TO PRESENT	

AAPSE NEWSLETTER

05A 003 (1972) - TO PRESENT *

ABRIDGED INDEX MEDICUS

04E 002 (1971) - TO PRESENT

0001-3331

ABST OF AIR AND WATER CONSERVATION LITERATURE

04R 001 (1969) - TO PRESENT

04M 001 (1970) - TO PRESENT

ABST OF DWR PUBLICATIONS. (CALIFORNIA DEPT. OF WATER RESOURCES)

03A 001 (1967) - 002 (1968)

ABST OF ENTOMOLOGY

03B 001 (1973) - TO PRESENT *

05R 002 (1971) - TO PRESENT

0001-3579

ABST OF LITERATURE ON THE BIOLOGICAL AND RELATED ASPECTS OF LEAD

04B 001 (1965) - TO PRESENT

ABST OF MYCOLOGY

04J 001 (1967) - 004 (1970)

ABST OF NORTH AMER GEOLOGY

02R 001 (1966) - (1971)

05R 001 (1966) - TO PRESENT

06R 001 (1966) - TO PRESENT

04A 001 (1969) - (1971)

10B 001 (1967) - TO PRESENT

ABST OF PAPERS

03B 001 (1964) - (1971) *

ABST OF RECENT PUBLISHED MATERIAL ON SOIL AND WATER CONSERVATION

03R 001 (1952) - (1967) *

ABST ON HEALTH EFFECTS OF ENVIRONMENTAL POLLUTANTS

03R 002 (1973) - TO PRESENT *

04M 001 (1972) - TO PRESENT

04N 001 (1972) - TO PRESENT

09A 001 (1972) - TO PRESENT

ABST ON HYGIENE
 04F 007 (1966) - TO PRESENT
 053 043 (1968) - TO PRESENT

ACCESS
 03E 001 (1971)
 05B (1969)

ACCESSION 3UL SOLID WASTE INFO RETRIEVAL SYSTEM
 03E 001 (1970) - TO PRESENT
 05B 001 (1970) - TO PRESENT

0001-3866

ACCOUNTS OF CHEM RESEARCH
 03R 001 (1968) - 001 (1968) *
 04N 001 (1968) - TO PRESENT
 05B 001 (1968) - TO PRESENT

ACCUMULATIVE VETERINARY INDEX
 04C 002 (1960) - TO PRESENT

ACOUSTICAL SOCIETY OF AMER. JNL
 03G 049 (1971) - TO PRESENT
 104 CURRENT ONLY

ACUSTICS ABSTRACTS
 05A (1973)

ACTA BIOCHIMICA POLONICA (ENGLISH TRANSLATION, WARSAW)
 04B 014 (1967) - TO PRESENT *

ACTA BIOLOGICA (F ACTA UNIVERSITATIS SZEGEDIENSIS)
 05C 020 (1969) - TO PRESENT

0001-3978

ACTA CHEMICA SCANDINAVICA
 05B 001 (1947) - 023 (1969) *

ACTA MEDICA JUGOSLAVICA (ENGLISH TRANSLATION, BELGRADE)
 04B 020 (1966) - TO PRESENT

ACTA PHARMACOLOGICS TOXICOLOGICS
 100 020 (1965) - 028 (1970)

ENVIRONMENTAL PROTECTION AGENCY
LIBRARY SYSTEM

1973 JOURNAL HOLDINGS

JNL ID NO 186600	WESTERN CITY MAGAZINE 044 (1968) - TO PRESENT	0006-4455
JNL ID NO 187100	WILDLIFE MONOGRAPHS (1969) - TO PRESENT *	
JNL ID NO 187200	WILDLIFE REVIEW 103 (1961) - TO PRESENT *	
JNL ID NO 187300	WILDLIFE SOCIETY NEWS (1969)	
JNL ID NO 187400	WILLING WATER 013 (1969) - TO PRESENT *	
JNL ID NO 187500	WILSON LIBRARY BUL 042 (1968) - 043 (1969) *	
JNL ID NO 187750	WORLD (1972) - TO PRESENT	0006-5566
JNL ID NO 187900	WORLD ECOLOGY 2000 002 (1971) - TO PRESENT *	
JNL ID NO 188000	WORLD HEALTH (1965) - TO PRESENT *	
JNL ID NO 188200	WORLD HEALTH ORGANIZATION, CHRONICLE 019 (1965) - TO PRESENT *	

* INDICATES MISSING ISSUES IN THE HOLDING

ENVIRONMENTAL PROTECTION AGENCY
LIBRARY SYSTEM

1973 JOURNAL HOLDINGS

JNL ID NO	188500	WORLD INDEX OF SCIENTIFIC TRANSLATIONS 002 (1968) - TO PRESENT	
JNL ID NO	188600	WORLD LIST OF FUTURE INTERNATIONAL MEETINGS (1967) - (1969)	
JNL ID NO	188700	WORLD MEETINGS OUTSIDE THE U.S. AND CANADA 001 (1968) - TO PRESENT	
JNL ID NO	188800	WORLD MEETINGS, U.S. AND CANADA 007 (1969) - TO PRESENT *	0006-5678
JNL ID NO	189100	WORLD REVIEW OF PEST CONTROL 004 (1965) - 008 (1969) *	
JNL ID NO	189500	ZEITSCHRIFT FUR WASSERRECHT 007 (1968) - 009 (1970) *	0006-5766
JNL ID NO	189550	ZERO POPULATION GROWTH NATIONAL REPORTER (1972) - TO PRESENT	
JNL ID NO	190000	102 MONITOR (COUNCIL ON ENVIRONMENTAL QUALITY) (1972) - TO PRESENT *	

* INDICATES MISSING ISSUES IN THE HOLDING

HARD BOUND BOOK SYSTEM

e Hard Bound Book System

Purpose and Scope

This system gathers data on the total book holdings in the agency. From the resulting title and holding files a union book catalogue (by title), subject report, and author report are generated for the total holdings. A title and Library of Congress classification number report (by title and by LC Number) is also available. Reports for individual library holdings are generated. All reports are available for distribution on microfiche.

Data Elements

Book titles are maintained on a title file. This file contains a book identification number and the book title. A second file contains all other information (holdings file). This includes the book identification number (through which the files are linked); Library of Congress classification number; primary and co-authors; publisher; subjects (as many as desired); library identification; volume or edition (if applicable); and date of publication. The files are designed in this manner so that a library location entry is all that is necessary to identify the same book in a new library. The system is flexible so that additional data elements can be added. Document #7 (page 21) is a sample file format.

Status

All of the computer programs are operational. Because of the vast book inventory held by the library network, EPA will build a history book file containing all books to August, 1973. This file should be in machine readable form by the end of 1974. Currently, the partial or complete holdings of twenty libraries are in machine readable form. Inventory reports have been generated from the existing data base. A portion of this file was generated under contract. The remainder was built inhouse using Vylbur. When the files are complete, all reports will be generated and distributed. These files will be permanently held on magnetic tape. At this time the system contains nearly 10,000 unique book titles.

Beginning in August, 1973, an accession file was created. This file will contain all holdings added in fiscal year 1974. The file is built and maintained using Vylbur. Accession inventory reports are distributed on a monthly basis. From this time forward, inventories will be built on a fiscal year basis. They will be maintained on-line for one year and then transferred to magnetic tape for permanent storage. Currently, over twenty of the twenty-eight libraries are participating in the accession book system.

Plans

The book history file should be completed by the end of 1974. The accession file will be expanded to include all EPA libraries.

Document #5 (pages 18-19) is a system flow of the history file building procedure.
 Document #6 (page 20) is a system flow of the current file building procedure.
 Document #8 (pages 22-23) is a sample of the total book catalogue by title.
 Document #9 (pages 24-25) is a sample of the total title run by the Library of Congress classification number.

Document #10 (pages 26-27) is a sample of the total title run by title (alphabetic).
 Document #11 (pages 28-29) is a sample of the book catalogue meeting a specific

subject(s) requirement.

Document #12 (pages 30-31) is a sample of the total subject run. The book title appears under each assigned subject.

Document #13 (pages 32-33) is a sample of the total author run. The title appears under both the primary and co-authors.

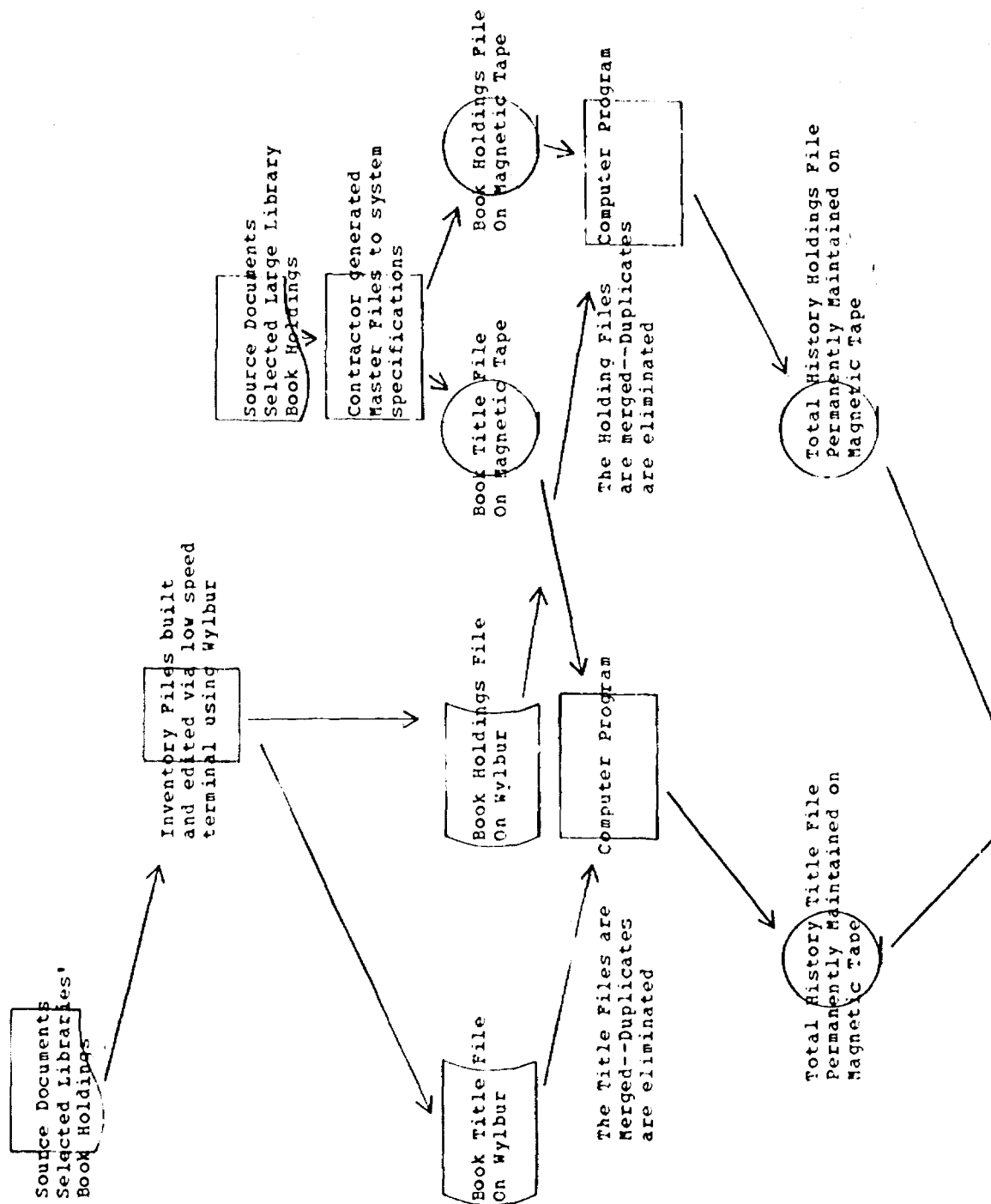
Each of the above book outputs is available for a given library in the total library network.

Document #14 (pages 34-35) is a sample of the monthly current awareness. This is generated from the accession file and is distributed by library.

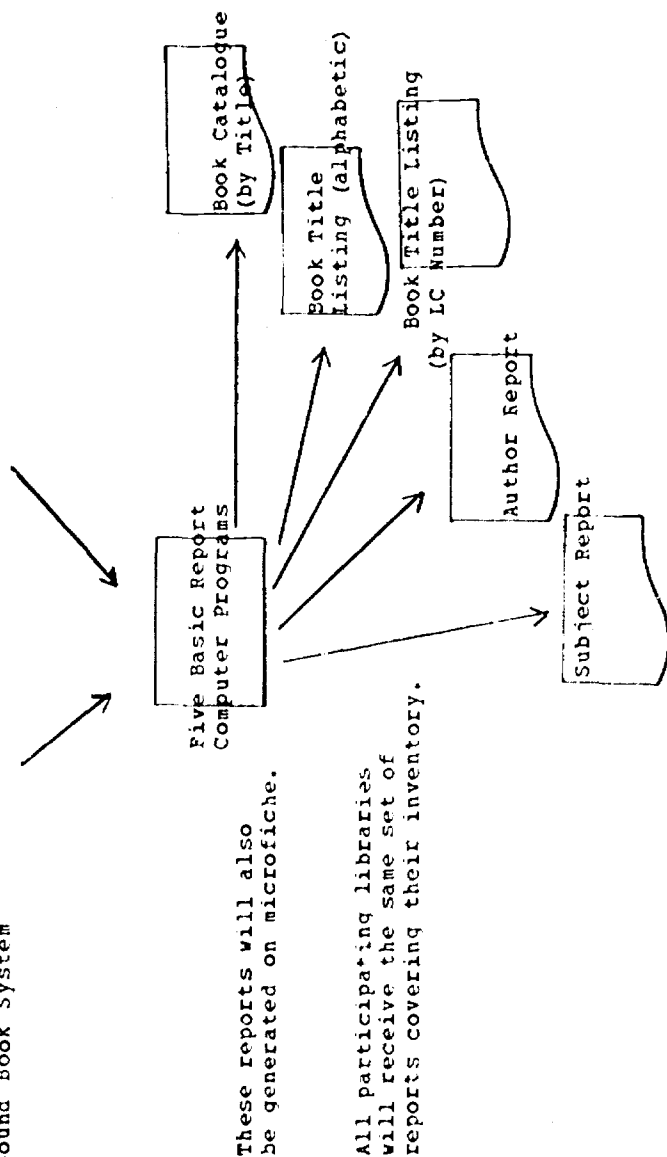
In addition, monthly and cumulative quarterly listings of the accession file are generated by title, author, and subject. Samples of these outputs are not included as they are very similar to the standard book system reports shown as samples of the history book outputs.

Document #5 System Flow--History File Building Procedure
Hard Bound Book System

These files will contain all book holdings held by EPA to August, 1973.

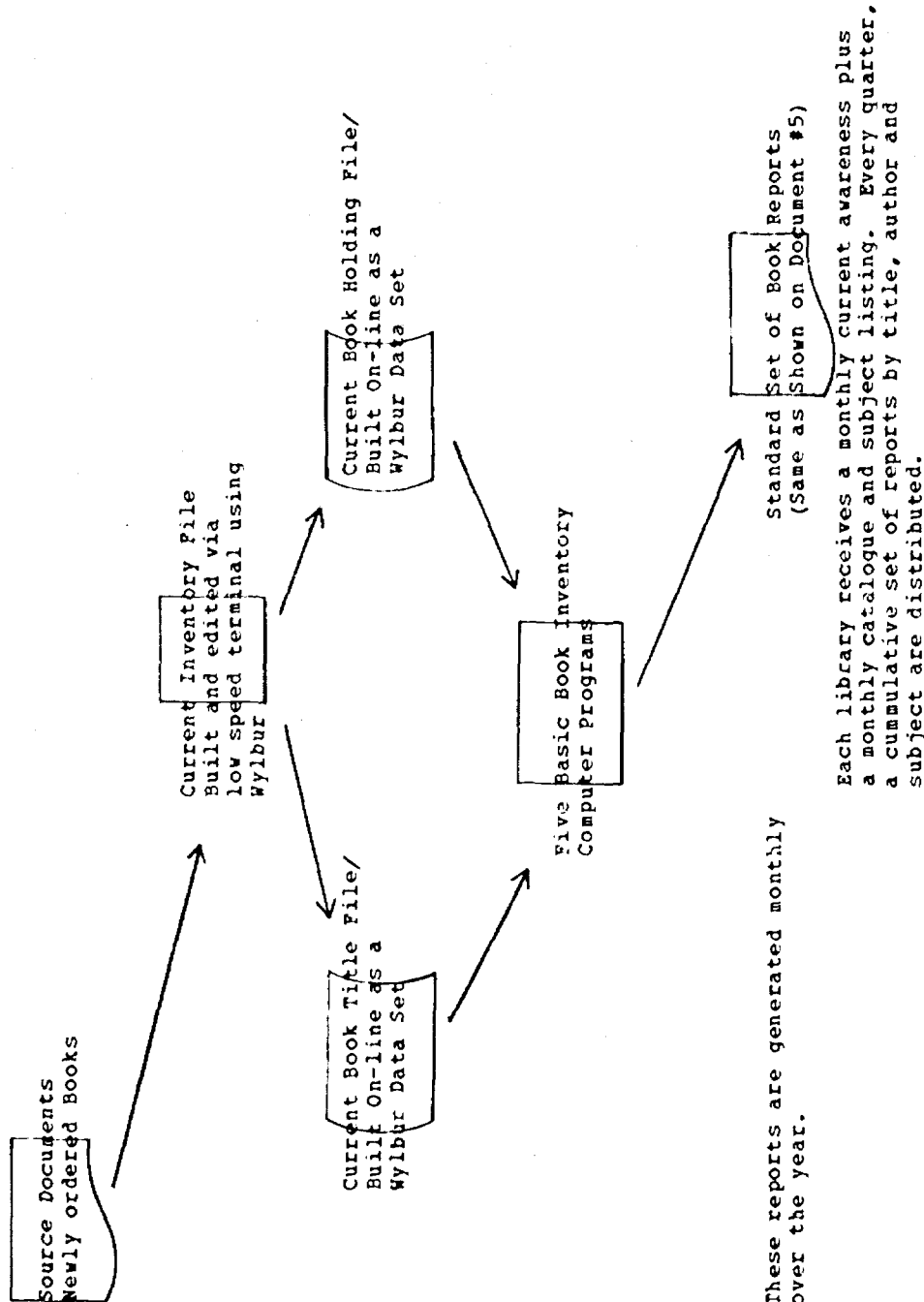


System Flow--History File Building Procedure



Document #6 System Flow--Accession File Building Procedure
Hard Bound Book System

This procedure began in August, 1973. Inventories will be maintained by fiscal year. In July, 1974, a current yearly inventory will be started again.



These reports are generated monthly over the year.

Sample File Layouts

Document #7
Hard Bound Book System

Book Title File

Book ID Number	Book Title
1000001	FAMOUS FIRST FACTS
1000002	SPECIALIZED SCIENCE INFORMATION SERVICES IN THE UNITED STATES
1000004	WORLD OF LEARNING
1000005	SCIENTIFIC AND TECHNICAL SOCIETIES OF THE UNITED STATES AND CANADA

Book Holding File

Book ID Number	Sub Record ID Number	LC Classification Number	Author (S)	Volume or Edition	Library ID Number	Date of Publication	Publisher
1000001	00AG5 K315		KANE JOSEPH N				WILSON
1000001	11	ENCYCLOPEDIAS + DICTIONARIES					NSF
1000001	20			03B ED 3			
1000002	00AG521 B3		BATTELLE MEMORIAL INSTITUTE				
1000002	11	INFORMATION SERVICES DIRECTORY					
1000002	20			03B			
1000004	00AS2 W6						LONDON EUROPA
1000004	11	LEARNED INSTITUTIONS + SOCIETIES					
1000004	20			03B ED 21			
1000005	00AS15 H3		NAS/NRC				NATL ACAD SCI
1000005	11	LEARNED INSTITUTIONS + SOC CANA US					
1000005	20			03B ED 8			

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QD111 K642

WASTE DISPOSAL
DISPOSAL OF RADIOACTIVE WASTES INTO SEAS OCEANS AND SURFACE WATERS
WASTE DISPOSAL IN THE MARINE ENVIRONMENT

T0898 S898 1966
TD511 I6

WASTE ECONOMICS
WASTE MAKERS

HC110 W3P3

WASTE PRODUCTS CONGRESSES
INDUSTRIAL WASTE CONFERENCE

TP995 A115

WASTE WATER TREATMENT
QUALITY AND POLLUTION RESEARCH 1969

TD370 J47 1969

WATER
ANNUAL BOOK OF AMERICAN SOCIETY FOR TESTING AND MATERIALS ASTM STANDARDS
LIVING WATER
STREAMS LAKES PONDS
WATER
WATER J S DEPARTMENT OF AGRICULTURE YEARBOOK

TA401 A653
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QH96 C6
GR671 L4
S21 A35 1955

WATER ADDRESS LEC
WATER FOR PEACE

MD1691 I5

WATER ANALYSIS
MICROSCOPY OF DRINKING WATER
PRACTICAL HANDBOOK OF SEAWATER ANALYSIS
RECOMMENDED PROCEDURES FOR THE EXAMINATION OF SEA WATER AND SHELLFISH

T0384 W58 1927
SH223 A344 NO 167
QR65 A52

WATER ANALYSIS ADDRESSES
TRACE INORGANICS IN WATER A SYMPOSIUM

Q01 A355 NO 73

WATER ANALYSIS 31BL
BIBLIOGRAPHY ON WATER AND SEWAGE ANALYSIS

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ANALYSIS OF ORGANIC POLLUTANTS IN WATER AND WASTE WATER

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BIOLOGICAL MINERALIZATION

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HANDBOOK OF CHEMISTRY AND PHYSICS

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QD139.P4H813

INTERNATIONAL SYMPOSIUM ON MODELING TECHNIQUES IN WATER RESOURCES SYSTEMS OTTAWA 1972 PROCEEDINGS

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Purpose and Scope

This system maintains information on all documents borrowed from an individual library. From the resulting master file, periodic reports (normally weekly) by document title and borrower's name are produced indicating all outstanding library material. In addition to these outputs, a quarterly report by borrower is distributed to all borrowers indicating the material which is over due. The system also provides an on-line clearance check for departing employees. In total, this application allows the librarian to monitor properly all aspects of library materials on loan.

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There is one master file containing one record per loaned document. Each record contains the document title; name of borrower; borrower's phone number; borrower's room number; date checked out; date due if inter-library loan; next individual waiting for the document; and the individual's phone number. The file is maintained on-line. Document #16 (page 38) is a sample file format.

Status

All of the computer programs are operational. The system is currently in use in the Washington D.C. library, the National Environmental Research Center libraries in Research Triangle Park, North Carolina, and Cincinnati, Ohio, and the regional libraries in Chicago and Seattle.

Plans

The agency plans to provide this system to any individual EPA library that has sufficient circulation. Many of the agency's libraries are small and will not need this service.

Document #15 (page 37) is a systems flow.

Document #17 (pages 39-40) is a sample of the periodic circulation title report.

Document #18 (pages 41-42) is a sample of the periodic inhouse report by borrower.

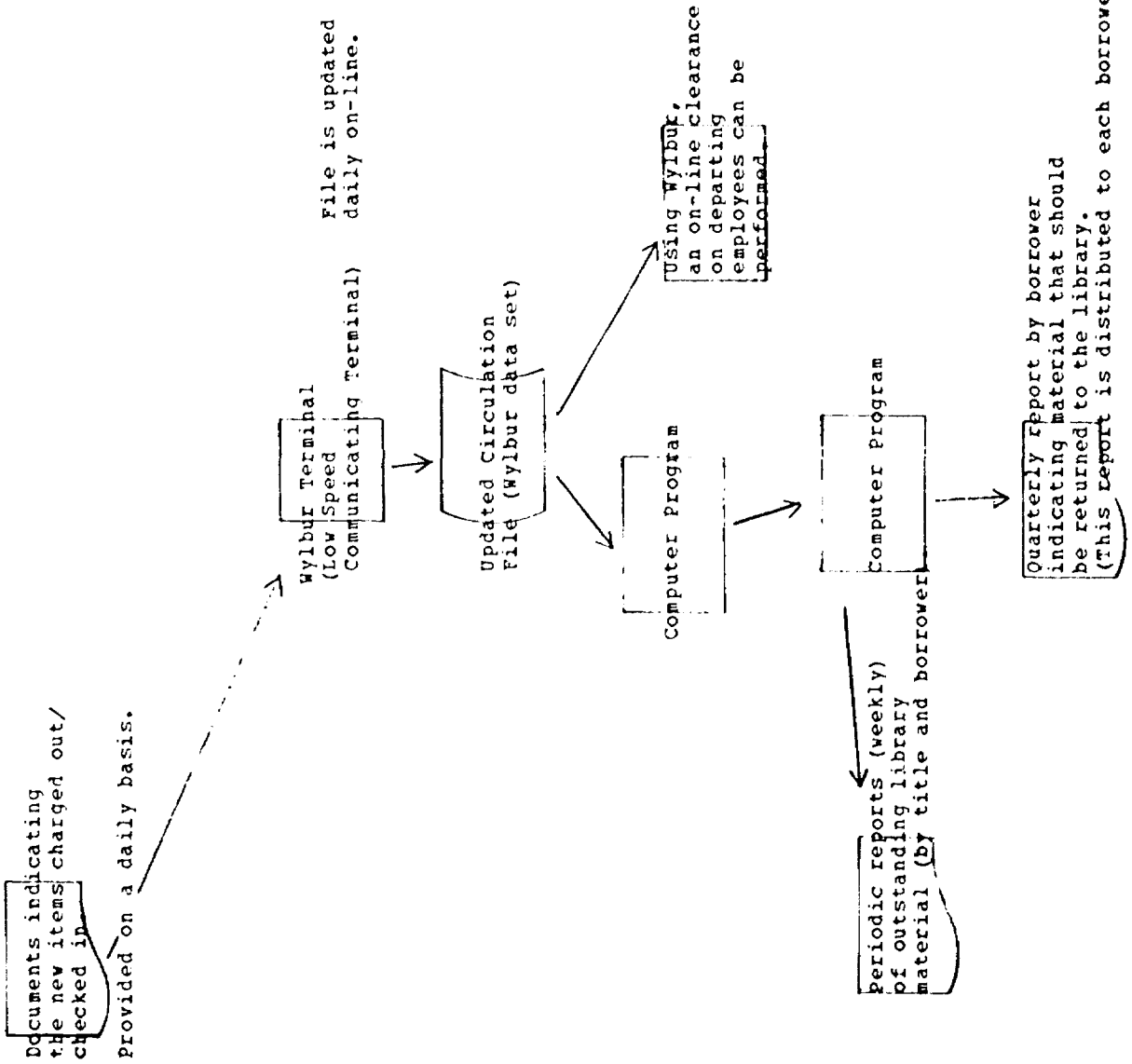
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WATER QUALITY CRITERIA	HOFFMAN A	XX5-2893	3318 WSM	03/27/73	
WATER RESEARCH 030072	JACKNOW J	XX5-2770	3241 WSM	04/11/73	
WATER RESEARCH	CONWAY E	386-5176	GAO LIB	04/02/73	04/16/73
WATER RESOURCES BULLETIN 020071	HIBBS J	XX5-0648	635W WSM	04/10/73	
WATER RESOURCES DEVELOPMENT	NOTZIN E	XX7-7614			
WATER RESOURCES SYSTEMS ENGN	HEADLEY A	XX5-0672		03/08/73	
WATER SPECTRUM 010072	JACKNOW J	XX5-0946	3617 WSM	04/09/73	
WATER SUPPLY SEWERAGE 2D ED	BERGMAN H	522-7162			
WATER-RESOURCES ENGINEERING	SU Y M	XX7-7490			
WEST VIRGINIA STATE PLAN FY6	PETERS A	XX7-7383			
WKLY COMP PRESENTL DOCS 030270	LOBIT J	XX5-0646			
WKLY COMP PRESENTL DOCS 012670	LOBIT J	XX5-0646			
WKLY COMP PRESENTL DOCS 081169	LOBIT J	XX5-0646			

-13-73
ENVIRONMENTAL PROTECTION AGENCY --- TITLE LISTING OF CIRCUL-FILE
HEADQUARTERS LIBRARY, WATERSIDE MALL, WASHINGTON, D.C.

DOCUMENT TITLE	BORROWER	PM NO	RM NUMBER	DATE OUT	DATE DUE
WKLY COMP PRESENTL DOCS	LOBIT J	XX5-0646			
WORLD DYNAMICS	SFIDEL M	522-6335	903 XER	04/05/73	
WORLD HLTH ORG TECH REP 506	JOHNSON M	XX5-0428		02/13/73	03/01/73
WORLD HLTH ORG TECH REP 511	JOHNSON M	XX5-0428		02/13/73	03/01/73
WPCRS 110240QU10/70	TRUTANIC M	XX5-2573			
WPCRS 110244EL901/71	TRUTANIC M	XX5-2573			
WPCRS 110344FKL07/70	TRUTANIC M	XX5-2573			
WPCRS 12020E1002/71	MAGRUDER J	762-5820	GEOMET	04/03/73	04/17/73
WPCRS 12060DS107/71	QUINN H	XX5-0524	811W WSM	03/27/73	
WPCRS 15080---03/69	VRANOR B	XX5-0900		02/23/73	
WPCRS 15090F0Z10/70	VRANOR B	XX5-0900		02/23/73	
WPCRS 160600MP03/71	PRIVAL M	XX5-0687	701W WSM	03/30/73	
WPCRS 16070---07/70	JACKNOW J	XX5-2770		03/20/73	
WPCRS 16130 ENT11/69	JACKSON D	XX5-0611	613W WSM	04/11/73	
WPCRS 16130---04/70	LEWIS D	426-3614		03/07/73	04/17/73
WPCRS 16130DJH01/71	ERNST M	973-7748	AEC LIB	03/21/73	04/04/73
WPCRS 16130DJH04/71	ERNST M	973-7748	AEC LIB	03/21/73	04/04/73
WPCRS 16130DP002/71	LEWIS D	426-3614		03/07/73	04/17/73
WPCRS 16130ENT11/69	LEWIS D	426-3614		03/07/73	04/17/73
WPCRS 16130FSU12/71	LEWIS D	426-3614		03/07/73	04/17/73
WPCRS 17010EL003/71	SUTTON W	XX7-0704		02/24/73	
WPCRS 17070---05/68	MORGOND S	XX5-2733		02/22/73	
WPCRS 17090---06/69	JACKNOW J	XX5-0946		02/23/73	
WPCRS 18060DAZ04/72	HITTERS M	676-7128	GWU LIB	04/02/73	04/16/73
WST OSPL 009LMS IN SLCTD IND	SONNETT W	XX7-7420			

ENVIRONMENTAL PROTECTION AGENCY - PERIODIC ANSWER REPORT
DOJANTERS LIBRARY, WATERGATE HALL, WASHINGTON, D.C.

CANTOR K	WORLD DYNAMICS	XX6-9455 637H WSM	121073
CAPLIN A	MANAGING WATER QUALITY ECONOMICS	XX5-0650 637H WSM	070373
CARPENTER D	PROGRAM BUDGETING	557-7725 810CE WSM	073073
	TOWARD MORE EFFECTIVE LAND USE	XX6-2928 810F WSM	101673
	URBAN LAND USE PLANNING	XX6-2928 810E WSM	101673
CARROLL A	ANNALS NY ACADEMY OF SCIENCES VOL 132	XX5-6956 709F WSM	111473 120873
	INTERNATIONAL CONGRESS PHARM 4TH 1969	XX5-6954 709F WSM	102373 110673
CARRILL J	ATMOSPHERIC ENVIRONMENT	XX5-2720 3238 WSM	103373
CASSEL C	PA 207 644	265-8982 LIBRARY	080373 081773
CASSELL C	CHEMICAL TREATMENT OF SEWAGE	265-8982 LIBRARY	112973 112373
	ELEMENTS OF WATER SUPPLY AND	265-8982 LIBRARY	110973 112373
	LIQUID WASTES OF INDUSTRY	265-8982 LIBRARY	110973 112373
CEDEP R	JOURNAL OF ENVMTL SCIENCES	XX6-8906 840F WSM	013074
	SOCIO-ECONOMIC PLANNING SCNGS 060073	XX6-2432 840F WSM	012974
	SOCIO-ECONOMIC PLANNING SCNGS 020073	XX6-2432 840F WSM	012974
CESSINE R	USDA AGRICULTURAL HANDBOOK 305	XX5-7014 503F WSM	120373
CESSINE R	CONTROL OF AGRICULTURE RLTD	XX5-0714 503F WSM	112073
	INITIAL ANALYSIS OF ECONOMIC	XX5-0714 503F WSM	112073
	US AGRICULTURE ENVMTL CILS AND	XX5-0714 503F WSM	112073
CHARLTON T	OUTLOOK ENERGY US TO 1995	XX7-7307	

11-74
ENVIRONMENTAL PROTECTION AGENCY - BIOLOGIC RESOURCES REPORT
HEADQUARTERS LIBRARY, WATERGATE MALL, WASHINGTON, D.C.

CHANDLER N					
ENVIRONMENTAL MERCURY PROBLEM					
			XX5-6183 4245 WSM		092573
CIPRIELLI J					
ASCE IRRIGATION & DRAINAGE J	090072		REC 9	FPA LIB	071373 072773
CIPRIELLI D P					
GAS CHROMATOGRAPHIC ANALYSIS			XX6-0413 3175 WSM		082173
CIPRIELLI D P					
STATISTICAL METHODS 4TH ED			XX5-0800 3608 WSM		070573
CLOSE C					
CONSERVATION OF NATL RESOURCES			XX5-0683 715W WSM		073073
RESOURCES AND MAN			XX5-0683 715W WSM		062973
SCARCITY AND GROWTH			XX5-0543 715W WSM		073073
COBLE P					
AD 750 094			XX5-0630 629W WSM		071273
COHEN V					
AUTOMATIC DATA PROCESSING			XX5-0911 3614 WSM		071073 072473
CONIGLIO W					
APT0-0970			XX5-2110 703E WSM		121273
APT0-1086			XX5-2110 703E WSM		121273
APT0-1466			XX5-2110 703E WSM		121273
APT0-1543			XX5-2110 703E WSM		121273
PR 188 074			XX5-2110 703E WSM		121273
PR 188 086		C1	XX5-2110 703E WSM		121273
PR 188 090		C1	XX5-2110 703E WSM		121273
PR 190 058			XX5-2110 703E WSM		121273
CONWAY E					
NATURAL RESOURCES JOURNAL	040070		386-5176 GAO LIB		011674 013074
NATURE FRIDAY	090373		396-5176 GAO LIB		011674 013074
NATURE FRIDAY	092173		396-5176 GAO LIB		011674 013074
COOK D					
ENVIRONMENTAL DEMONSTRATIONS			XX5-2937 3105 WSM		092773

3-73
ENVIRONMENTAL PROTECTION AGENCY
QUARTERS LIBRARY, WATERSIDE MALL, WASHINGTON, D.C.

TO: JOHNSON E L

THE FOLLOWING LIBRARY MATERIAL HAS BEEN CHARGED TO YOUR NAME:

FIRST SIGNIFICANT WORDS OF TITLE	DATE CHECKED OUT
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MANS IMPACT ON GLOBAL ENVIRMT	
-------------------------------	--

POLITICS OF ECOLOGY	
---------------------	--

IN ORDER TO UPDATE LIBRARY RECORDS, PLEASE ADVISE MR. BRUCE
INGALLS (755-0309) OF THE STATUS OF THIS OUTSTANDING
MATERIAL.

TO: JOHNSON R

THE FOLLOWING LIBRARY MATERIAL HAS BEEN CHARGED TO YOUR NAME:

FIRST SIGNIFICANT WORDS OF TITLE	DATE CHECKED OUT
----------------------------------	------------------

SCIENCE	100369
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IN ORDER TO UPDATE LIBRARY RECORDS, PLEASE ADVISE MR. BRUCE
INGALLS (755-0308) OF THE STATUS OF THIS OUTSTANDING
MATERIAL.

PESTICIDES LITERATURE SEARCH SYSTEM

Pesticides Literature Search System
 (This system has been developed for the Technical Services Division
 in the Office of Pesticide Programs.)

Purpose and Scope

This system gathers bibliographic information on literature concerned with the health aspects of pesticides. From the resulting master file, various, complete and refined bibliographies are generated. The bibliographies are available by author, subject classification, CAS Registry Number, and date of publication. These bibliographies will be generally available in both printed form and on microfiche. By using these bibliographies, literature will be readily identified that will satisfy a particular users information need. The Technical Services Division also maintains an inventory of the articles. All articles reviewed since 1969, are available on microfiche.

Data Elements

All of the bibliographic information is contained in a single file format. The data elements include a unique bibliographic identification number; primary and secondary authors; CAS Registry Number (unique compound number assigned by The Chemistry Abstract Service); HAPAB Abstract Number (the number of the abstract as it appears in the published bulletin); title of the article; source of the article (and type); year of publication; remarks field; foreign language (if applicable); and the primary and secondary subject classifications (assigned by the Technical Services Division). This represents a comprehensive bibliographic system which allows the data managers and users to access the data in every meaningful way. Document #21 (page 48) is a sample file format.

Status

All of the computer programs are operational. The history bibliographies number over 30,000. For this reason, a large portion of the citations will be prepared under contract. Currently, members of the Technical Services Division have converted 1000 of the history bibliographies to machine readable form. When the history file is complete (approximately December, 1974) it will be maintained on magnetic tape.

Also, the staff is using the system to gather and maintain all new bibliographies. The first computer generated current awareness report was distributed in April, 1973.

Plans

The efforts necessary to convert the large history file to machine readable form are proceeding as rapidly as possible. The staff will continue to use the system to gather and maintain all current citations. Computer generated current bibliographies will be made available as needed.

Document #20 (page 47) is a systems flow.
 Document #22 (pages 49-50) is a sample of the subject classification report.

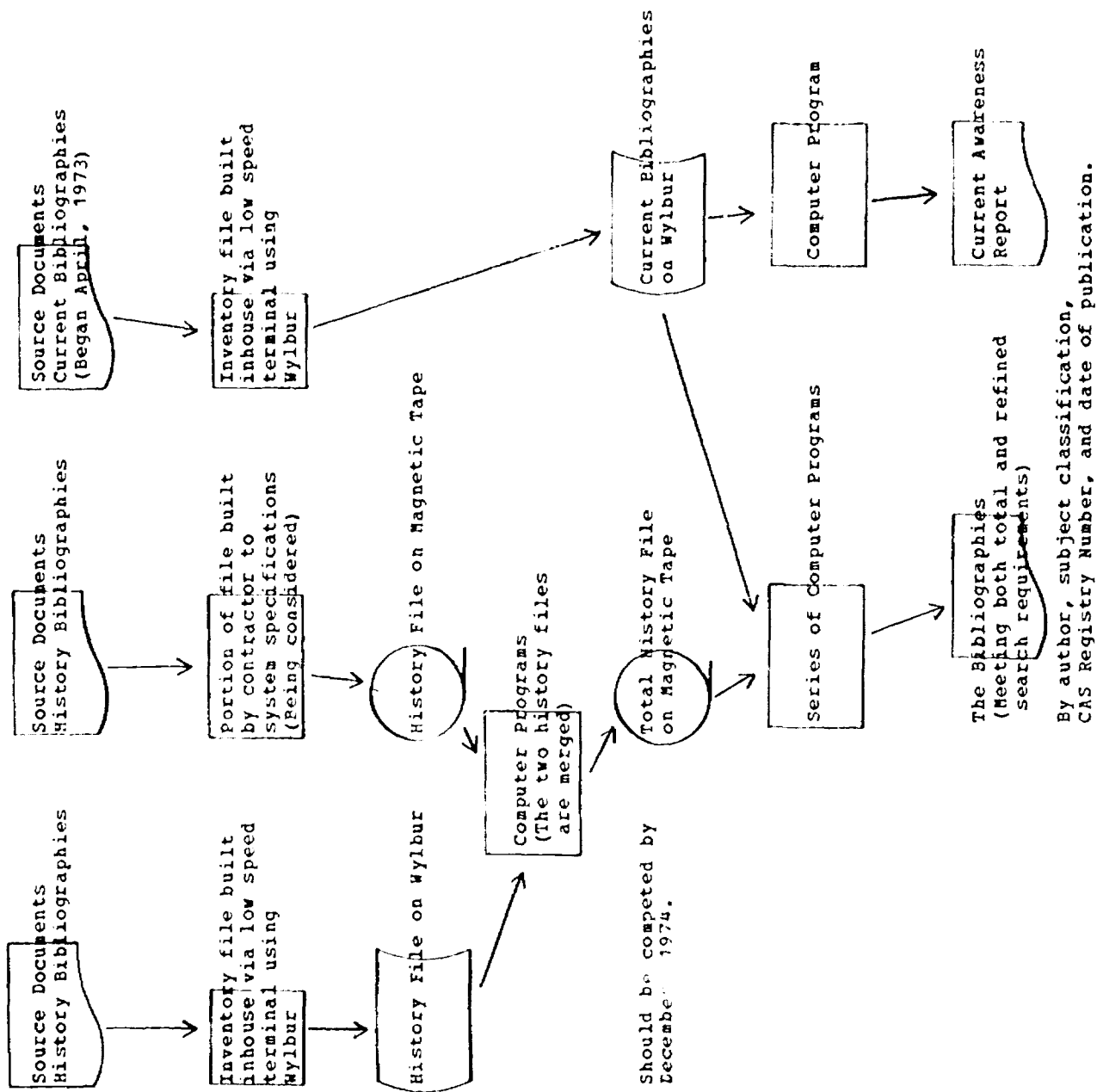
Document #23 (pages 51-52) is a sample of the author report.
Document #24 (pages 53-54) is a sample of the date of publication report.
Document #25 (pages 55-56) is a sample of the journal (source) title report.

These reports represent the basic report inventory. Additional reports are available.

A refined bibliographic search can be generated and printed in report forms #22-24.

All report heading information can be adjusted to a particular user's need.

System Flow



Should be completed by
December 1974.

By author, subject classification,
CAS Registry Number, and date of publication.

Document #21 Sample File Layout
The Pesticides Literature Search System

48

Master File

Bibliographic ID Number	Author(s)	Source Information (Type--P=Periodical, B=Book,etc)	CAS Registry Number (if applicable) (none shown)	HAPAB Number (none shown)
100000 ANONYMOUS CHICAGO MEETING OF ACS PRESENTS NUMEROUS PAPERS ON AGRICULTURAL CHEMICALS: INSECTICIDES, HERBICIDES, FUNGICIDES, FERTILIZERS				
F AGR CHEM 8(9): 60-62, 65, 1953				
1953				
S1004000000				
100001 ADELSON L POISON AND THE PATHOLOGIST				
P J AMER MED ASSOC 187: 918-920, 1964 1964				
S1004000000				

Year of Publication

Remarks (if applicable)

Foreign Language (none shown)

Subject Classification
(primary and secondary)

0100000000

0100000000

ENVIRONMENTAL PROTECTION AGENCY
NICAL SERVICES DIVISION

CLASSIFICATION NO/AUTHOR/PUBL YR SCHEDULE

PROG: PEST-CLASSAUM

1004000000
1201000000

1959

SHEPARD H H

THE PESTICIDE SITUATION FOR 1958-59. GENERAL OUTLOOK
USDA COMMODITY STABILIZATION SVC, WASH D C PP 24, APR 1959
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100576

1004000000
1200000000

1965

MITCHELL L E

PESTICIDES: PROPERTIES AND PROGNOSIS
AMERICAN CHEMICAL SOCIETY, 150TH NAT MEETING, SEPT. 13-17, 1965
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100541

1004000000
2100000000

1969

BRODIE R B
SOME PROSPECTS IN TOXICOLOGY
ENVIRON OFS
2 (5-6): 368-72, 1969
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100585

1004000000
2106060000

1964

ALPERT J J
TREATMENT OF ACUTE POISONING
BRIT MED J
2:1593, 1964
LANGUAGE*
HAPAB NO:
REMARKS: IM 65-1120, 1965

CAS:

100627

PROG: PEST-CLASSAUTH

S1004000000
0100000000

1964

ADOLSON L
PTJISON AND THE PATHOLOGIST
J AMER MED ASSOC
187:918-920, 1964
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100001

S1004000000
0100000000

1953

ANONYMUS
CHICAGO MEETING OF ACS PRESENTS NUMEROUS PAPERS ON AGRICULTURAL CHEMICALS:
INSECTICIDES, HERRICIDES, FUNGICIDES, FERTILIZERS
AGR CHEM
8(9): 60-62, 65, 1953
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100000

S1004000000
0100000000

1953

BARNES J M
SELECT BIBLIOGRAPHY ON THE TOXICOLOGY OF PESTICIDES IN MAN AND MAMMALS
BULL WLD HLTH ORGAN
8(4):535-589, 1953
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100002

S1004000000
0100000000

1957

BARNES J M
CONTROL OF HEALTH HAZARDS ASSOCIATED WITH THE USE OF PESTICIDES
ADVANCES PEST CONTROL RESARCH
VOL 1 EDITED BY R L METCALF, INTERSCIENCE, NEW YORK, 1957
LANGUAGE*
HAPAB NO:
REMARKS:

CAS:

100003

AUTHOR/YEAR SCHEDULE

PRG: PEST.AUT.YEAR

AINSWORTH M

1960

SI004000000
0203010500

METHODS FOR MEASURING PERCUTANEOUS ABSORPTION

J SOC COSMETIC CHEM

XI(2):59-78, 1960

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

100337

ALARASTER J S
ARRAM F S H

1965

SI004000000
0203010500

ESTIMATING THE TOXICITY OF PESTICIDES TO FISH

PANS

11(2):91-9, 1965

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

ABST: WHO INFORM CIRC NO. 20: ABST NO. 45, 1966

100038

ALARIE Y

1966

SI004000000
0203010500

IRRITATING PROPERTIES OF AIRBORNE MATERIALS TO THE UPPER RESPIRATORY TRACT

ARCH ENVIRON HLTH

13:433-449, 1966

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

100039

ALAZS T
ET AL

1963

SI004000000
2103110200

RENAL TESTS IN TOXICITY STUDIES ON RATS

TOXICOL APPL PHARMACOL

5:661-74, 1963

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

10610

18-73
ENVIRONMENTAL PROTECTION AGENCY
TECHNICAL SERVICES DIVISION

AUTHOR/YEAR SCHEDULE

PROC: PEST.AUTHYFAP

ALBARMY C
MARTIN S

1962

S1004000000
2103000000

HEMATOLOGICAL PROBLEMS POSED BY VARIOUS OCCUPATIONAL DISEASES

NOUV REV FRANC HEMAT

2:230-240, 1962

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

100627

ALPERT J J

1964

S1004000000
2106060000

TREATMENT OF ACUTE POISONING

BRIT MED J

2:1593, 1964

LANGUAGE*

HAPAB NO:

REMARKS: IN 65-1120, 1965

CAS:

100627

AMA COUN IND HLTH

1954

S1004000000
2001100000

ROLE OF THE PATCH TEST IN CONTACT DERMATITIS

J AMER MED ASSOC

156:501, 1954

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

100578

1959

S1004000000
2001100000

OCCUPATIONAL DERMATOSES. A SERIES OF FIVE REPORTS.

AMER MED ASSOC

167:1636-1637, 2203-2205, 1958 & 168:516-520, 1351-1359, 1958 & 169:1340-1344, 1959

LANGUAGE*

HAPAB NO:

REMARKS:

CAS:

100579

ENVIRONMENTAL PROTECTION AGENCY
CHEMICAL SERVICES DIVISION

YEAR OF PUBLICATION SCHEDULE

PROG: PEST-VEAP0014

1970

BLAKE H T

ET AL

SI004000000
1200000000

FARMERS' PESTICIDE EXPENDITURES IN 1966
USDA ECONOMIC RESEARCH SERVICE AGO ECON REPORT NO 192, 43PP., 1970

LANGUAGE#
HAPAR NO:
REMARKS:

CAS:

100506

FITCHES T

QUANTITIES OF PESTICIDES USED BY FARMERS IN 1966
QUANTITIES OF PESTICIDES USED BY FARMERS IN 1966
USDA ECONOMIC RES. SER., AGO. ECON REPORT NO. 179, 61 PP, 1970

LANGUAGE#
HAPAR NO:
REMARKS:

CAS:

100518

SI004000000
1200000000
ET AL

FOWLER D L

PESTICIDE REVIEW 1969
USDA, AGO. STABILIZATION & CONSERVATION SER., 48 PP., 1970

LANGUAGE#
HAPAR NO:
REMARKS:

CAS:

100519

SI004000000
0203010500

FRIDMAN L

SYMPOSIUM ON THE EVALUATION OF THE SAFETY OF FOOD ADDITIVES AND CHEMICAL RESIDUES:
II. THE ROLE OF THE LABORATORY ANIMAL STUDY OF INTERMEDIATE DURATION FOR EVALUATION OF
SAFETY

TOXICOL APPL PHARMACOL
16(2):498-506, 1970
LANGUAGE#
HAPAR NO:
REMARKS:

CAS:

100092

1-19-73
ENVIRONMENTAL PROTECTION AGENCY
CHEMICAL SERVICES DIVISION

YEAR OF PUBLICATION SCHEDULE

DDGG: PEST.YEARAITH

1969

JENKINS R

ET AL

SI004000000
1200000000

PESTICIDE APPLICATION EQUIPMENT OWNED BY FARMERS, 48 STATES
USDA, ARS, ECON RES SERV, AGR ECON REP NO. 161, 1969
LANGUAGE*
HAPAR NO:
REMARKS:

100529

CAS:

SI004000000
2100000000

LAWTTE L C
PESTICIDES AND HUMAN HEALTH--A QUERY
BULL ENTOMOL SOC AMER
15(4):373-6, 1969
LANGUAGE*
HAPAR NT:
REMARKS:

100600

CAS:

SI004000000
0203010500

NAS/NRC FOOD PROTECT COMM

GUIDELINES FOR ESTIMATING TOXICOLOGICALLY INSIGNIFICANT LEVELS OF CHEMICALS IN FOOD
NAS/NRC R 00, 1969
LANGUAGE*
HAPAR NO:
REMARKS:

100089

CAS:

PERIODICAL TITLE LISTING

PROG: PEST.PEPTITLE

ACTA PHYSIOL PHARMACOL NEERLAND
ACTA PHYSIOL SCAN
ACTUALITIES PHARMACOL
ADV CHEM SER
ADVANCES IN CHEMISTRY SERIES
ADVANCES PEST CONTROL RESEARCH
AGR CHEM
AGR RESEARCH
AM IND HYG ASSOC J
AMA ARCH INDUST HEALTH
AMA ARCH INDUST HYG OCCUP MED
AMCO IND HYG ASSOC J
AMED J MED SCI
AMER SCIENT
AMED SOC AGR ENG TRANS
ANN AGR PENN
ANN APPL BOTL
ANN EPIDEMIOLOG
ANN NY ACAD SCI
ANN REV PHARMACOL
ANNU REV PHARMACOL
ANNUAL REVIEW OF ENTOMOLOGY
ARCH ENVIRON HEALTH
ARCH ENVIRON HLTH

19-73
ENVIRONMENTAL PROTECTION AGENCY
TECHNICAL SERVICES DIVISION

PERIODICAL TITLE LISTING

P000: PEST.PESTITLE

ARCH INDIKTR HVS OCCUP MEN

ARCH INT MED

ARCH INT PHARMACODYN

ARCH MAL PROF

ARCH TOXIKOL

AUDUBON BULL

BOLL 1ST PATOL LIBRO

BRUCE THOMPSON INST

BRIT MED J

BRIT VET J

BULL ENTOMOL SOC AMER

BULL WLD HLTH ORGAN

CANAD FARM IMPR

CANAD J BIOCHEM

CANAD J PHYSIOL PHARMACOL

CANAD MED ASSOC J

CANCER CHEMO REP

CAROLINA MED J

CHEM AND CHEM PROCESS INDUSTRIES

CHEM ENG NEWS

CHEM ENG PROG

CHEM IND

CHEM WEEK

CIENCE

ECOLOGICAL AIR POLLUTANT LITERATURE SEARCH SYSTEM

The Ecological Air Pollutant Literature Search System
(This system has been developed for the National Ecological Research Laboratory.)

Purpose and Scope

This system gathers bibliographic information on literature principally concerned with air pollutants and their effects on vegetation and animals. In addition, some citations deal in the research support areas and in heavy metals. Computer generated bibliographies (by author, subject, article title, and library reprint number), will be produced from the master file. The referenced literature is available in The National Ecological Research Laboratory's reprint library. By using these bibliographies, literature meeting a particular information need can be readily identified and made available to the user. Total bibliographies will be available on microfiche as well as in printed form.

Data Elements

All bibliographic information is contained in a single file format. The data elements include a unique bibliographic identification number; up to four authors; up to nine subjects (selected from a subject thesaurus); a library reprint number (indicates the location of the article in the library); the article title; source information; translation information (if applicable); Air Pollution Technical Information Center number (APTIC); date of publication; and a remarks field (if applicable). This bibliography completely identifies pertinent literature in this subject area. Document #27 (page 59) is a sample file format.

Status

All of the computer programs are operational. Currently, there are approximately 6,000 citations (bibliographies) on file in The National Ecological Research Laboratory's library. Under contract, these bibliographies have been converted to the system specifications. The retrospective master file is complete. The various bibliographic reports are available on microfiche (COM).

Plans

In March, 1974, new bibliographies will be added to the master file (using Wylbur) as needed. Requested bibliographies should be available within 24 hours of the time requested. Refined bibliographies can be generated with variable heading information. The master file will be permanently maintained on magnetic tape. The full articles are to be microfiched to enhance distribution at very reduced costs.

Document #26 (page 58) is a system flow.

Document #28 (pages 60-61) is a sample of the article title report.

Document #29 (pages 62-63) is a sample of the library reprint number report.

Document #30 (pages 64-65) is a sample of the primary author report.

Document #31 (pages 66-67) is a sample of the author report-multiple indexed.

Each article is shown under all assigned authors.

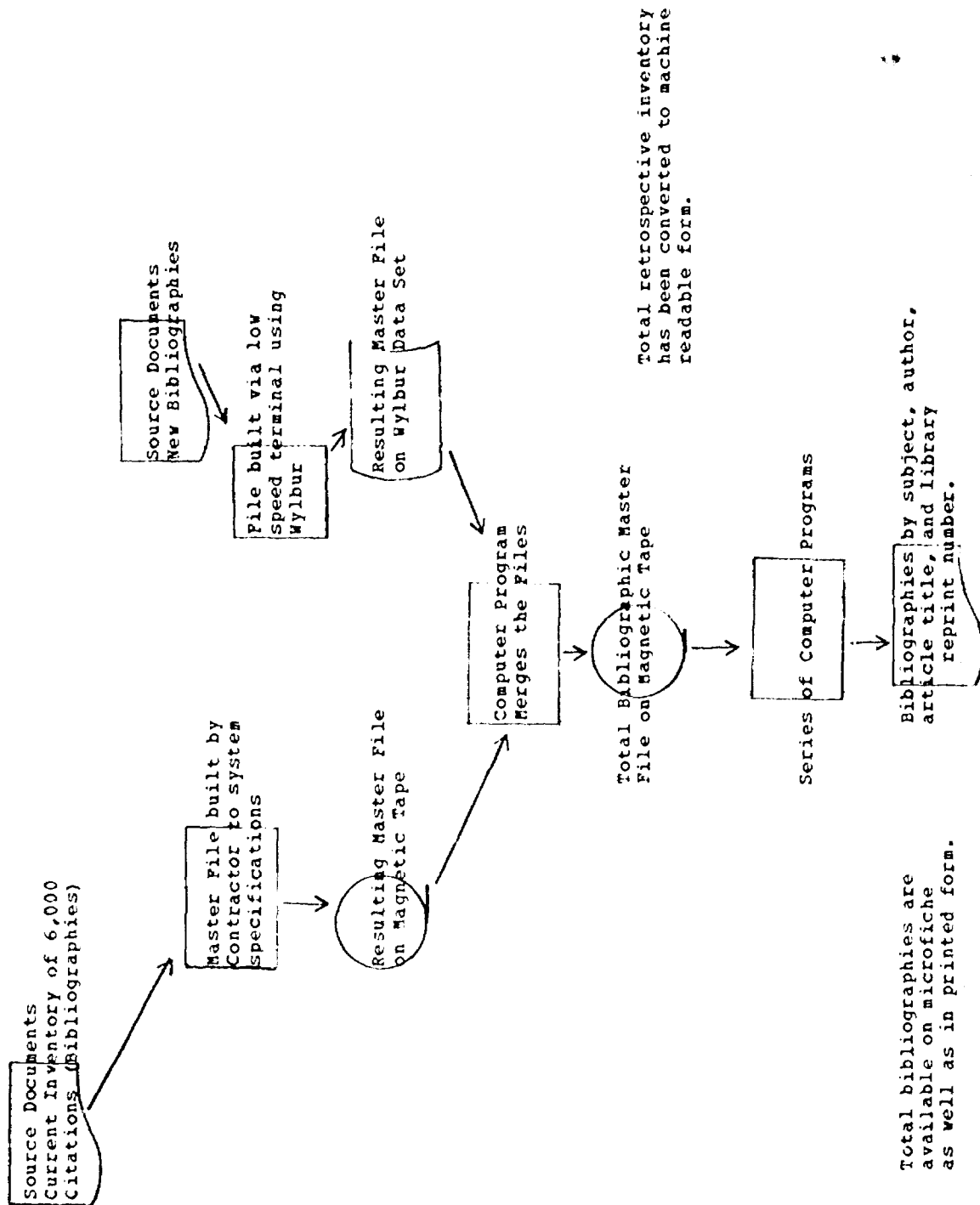
AN ** indicates the primary author in all cases.

Document #32 (pages 68-69) is a sample of the subject report-multiple indexed.

Each article is shown under all assigned subjects.

This represents the basic (but not complete) report inventory.

Document #26 System Flow
The Ecological Air Pollutant Literature
Search System



Master File

Bibliographic ID Number	Author(s)	Library Reprint Number
Title of Article		
Main Subject Area		
00001 HECK W W H-450 1 GER T 11305 TOBACCO A SENSITIVE MONITOR FOR PHOTOCHEMICAL AIR POLLUTION	POX F L	BRANDT C S
12D TOBACCO		12E OXIDANT
1969 U. S. DEPT. HEW, NAPCA PUBL. NO. AP-55. 23 PP		
00002 HECK W W H-416 OZONE TIME CONCENTRATION MODEL TO PREDICT ACUTE FOLIAR INJURY	TINGEY D T	
12E OZONE		12B TIME CONCENTRATION
1971 SECOND INTERNATIONAL CLEAN AIR CONGRESS, PROCEEDINGS. PP 249-255. ACADEMIC PRESS, NEW YORK ENGLUND H M & BERRY W T EDS		
Subject(s)	Date of Publication	Source Information
APTIC No	Remarks (if applicable)	Translation/Language (if applicable)

3 AP CONTROL METHODS & DEVICES

12D PLANTS INVESTIGATED

TITLE SCHEDULE

0000: AP.TITLE

ABSCISSION: ROLE OF PROTEIN SYNTHESIS

A-203 ABEL'S F R HOLM R F
1967 ANNALS N. Y. ACAD. SCI. 144(ART.1):367-373
SUBJECT(S):
27B ABSCISSION 27C NITROGEN METABOLISM
27A ETHYLENE (PHYS) 12D BEAN

2 12D COTTON

ABSCISSION: THE ROLE OF AGING

A-253 ABEL'S F R HOLM R F
1967 PLANT PHYSIOL. 42:1351-1356
SUBJECT(S):
12B BEAN
27B SENEESCENCE

GAHAGAN H E

2 27B ETHYLENE (PHYS)
23 MEASUREMENTS
27B ABSCISSION
27B GROWTH REGULATION

BIOCHEMICAL PATHWAY OF STRESS-INDUCED ETHYLENE

A-251 ABEL'S A L ABEL'S F R
1972 PLANT PHYSIOL. 50:494-498
SUBJECT(S):
27A ETHYLENE (PHYS)
12E 070NF
27A GROWTH REGULATORS

12D 9EAN
27C RESPIRATION

1 12D TOBACCO
27C PHOTOSYNTHESIS

CELL-FREE ETHYLENE EVOLUTION FROM ETIOLATED PEA SEEDLINGS

A-052 ABEL'S F R RUBENSTEIN B
1964 BIOCHEM. BIOPHYS. ACTA 93:675-677
SUBJECT(S):
12D PEA

27B ETHYLENE (PHYS)

EFFECT OF ETHYLENE ON AUXIN TRANSPORT

A-034 ABEL'S F R
1966 PLANT PHYSIOL 41:946-948
SUBJECT(S):
27A ETHYLENE (PHYS)
12D COTTON
30B AUXIN

2 12D SUNFLOWER
12D COLEUS

PROG: AP, TITLE

ETHYLENE PRODUCTION FROM LINOLENIC ACID

A-032 ARELES F R

1966 NATURE 210(5031):23-25

SUBJECT(S):

120 PEAN

120 BEAN

2

279 ETHYLENE (PHYS)

MECHANISM OF ACTION OF ABSCISSION ACCELERATORS

A-124

ARELES F R

1967 PHYSIOL. PLANT. 20:442-454

SUBJECT(S):

278 AUXINS

279 SENEESCENCE

2

278 ABSCISSION

128 COTTON

278 ETHYLENE (PHYS)

ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERE

A-028

ABBOTT D C

HARRISON R R

1966 NATURE 211(5046):259-261

SUBJECT(S):

126 CHLORINE COMPOUNDS

TATTON J D

THOMSON J

5

25 PESTICIDES

23 CHEMICAL

ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERIC ENVIRONMENT

A-140

ABBOTT D C

HARRISON R R

1965 NATURE 208:1317-1318

SUBJECT(S):

25 INSECTICIDES

TATTON J D

THOMSON J

5

PROC: AP.REPRINTNO

A-004	ARELES F B EFFECT OF ETHYLENE ON AUXIN TRANSPORT 1966 PLANT PHYSIOL 41:946-948	2	
01179	SUBJECT(S): 278 ETHYLENE (PHYS) 120 COTTON 308 AUXIN		120 CORN 120 BEAN 120 SUNFLOWER 120 COLEUS
A-028	ABBOTT D C ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERE 1966 NATURE 211(5046):259-261		THOMSON J
	SUBJECT(S): 12F CHLORINE COMPOUNDS	5	23 CHEMICAL
A-032	ARELES F B ETHYLENE PRODUCTION FROM LINOLENIC ACID 1966 NATURE 210(5031):23-25	2	
	SUBJECT(S): 120 PEA		278 ETHYLENE (PHYS)
A-052	ARELES F B CELL-FREE ETHYLENE EVOLUTION FROM ETIOLATED PEA SEEDLINGS 1966 BIOCHEM. BIOPHYS. ACTA 93:675-677	2	
	SUBJECT(S): 120 PEA		278 ETHYLENE (PHYS)
A-093	ARELES F B ABSCISSION: THE ROLE OF AGING 1967 PLANT PHYSIOL. 42:1351-1356	2	
	SUBJECT(S): 12R BEAN 27A SENESCENCE		278 ABSCISSION 278 GROWTH REGULATORS
A-124	ARELES F B MECHANISM OF ACTION OF ABSCISSION ACCELERATORS 1967 PHYSIOL. PLANT. 20:442-454	2	
	SUBJECT(S): 27A AUXINS 27A SENESCENCE		278 ABSCISSION

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A-140	ABOTT D C ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERIC ENVIRONMENT 1965 NATURE 208:1317-1318 SUBJECT(S): 25 INSECTICIDES	HARRISON R B YATTON J O	THOMSON J 5
A-203	ABELES F R ARSCISSION: ROLE OF PROTEIN SYNTHESIS 1967 ANNALS N. Y. ACAD. SCI. 144(PART.1):367-373 SUBJECT(S): 278 ARSCISSION 278 ETHYLENE (PHYS)	HOLM R E 27C NITROGEN METABOLISM 12D BEAN	2 12D COTTON
A-251	ABELES A L BIOCHEMICAL PATHWAY OF STRESS-INDUCED ETHYLENE 1972 PLANT PHYSIOL. 50:496-498 SUBJECT(S): 278 ETHYLENE (PHYS) 12F OZONE 278 GROWTH REGULATORS	ABELES F R 12D BEAN 27C RESPIRATION	1 12D TOBACCO 27C PHOTOSYNTHESIS

AUTHOR SCHEDULE

ORIG: AP-AUTH

ABRAHAM D C	HARRISON R R	TATTON J O	THOMSON J	5	A-140
1965	ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERIC ENVIRONMENT				
	NATURE 208:1317-1318				
	SUBJECT(S):				
	25 INSECTICIDES				
1965	ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERE	TATTON J O	THOMSON J	5	A-028
	NATURE 211(5046):259-261				
	SUBJECT(S):				
	12E CHLORINE COMPOUNDS	25 PESTICIDES		23	CHEMICAL
ABELES A L	ABELES F B			1	A-251
1972	BIOCHEMICAL PATHWAY OF STRESS-INDUCED ETHYLENE				
	PLANT PHYSIOL. 50:495-498				
	SUBJECT(S):				
	27R ETHYLENE (PHYS)	12D BEAN		12D	TOBACCO
	12F OZONE	27C RESPIRATION		27C	PHOTOSYNTHESIS
	27R GROWTH REGULATORS				
ABELES F B	RURENSTEIN B			2	A-052
1964	CELL-FREE ETHYLENE EVOLUTION FROM ETIOLATED PEA SEEDLINGS				
	BIOCHEM. BIOPHYS. ACTA 93:675-677				
	SUBJECT(S):				
	12D PEA	27R ETHYLENE (PHYS)			
1965	ETHYLENE PRODUCTION FROM LINOLENIC ACID			2	A-032
	NATURE 210(5031):23-25				
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	12D PEA	12D BEAN		27R	ETHYLENE (PHYS)
1965	EFFECT OF ETHYLENE ON AUXIN TRANSPORT			2	A-004
	PLANT PHYSIOL 41:946-948				01179
	SUBJECT(S):				
	27R ETHYLENE (PHYS)	12D CORN		12D	SUNFLOWER
	12D COTTON	12D BEAN		12D	COLFUS
	30R AUXIN				

007G: AP.AUTH

ARELCS F R

MECHANISM OF ACTION OF ABSCISSION ACCELERATORS

1967 PHYSIOL. PLANT. 20:442-454

SUBJECT(S):

27B AUXINS

27B SENESENCE

12R COTTON

27B ETHYLENE (PHYS)

27B ABSCISSION

2 A-124

HOLM R F

ABSCISSION: THE ROLE OF AGING

1967 PLANT PHYSIOL. 42:1351-1356

SUBJECT(S):

12R BEAN

27R SENESENCE

27B ETHYLENE (PHYS)

23 MEASUREMENTS

27B ABSCISSION

27B GROWTH REGULATION

2 A-083

HOLM R F

ABSCISSION: ROLE OF PROTEIN SYNTHESIS

1967 ANNALS N. Y. ACAD. SCI. 144(PART.1):367-373

SUBJECT(S):

27R ABSCISSION

27R ETHYLENE (PHYS)

27C NITROGEN METABOLISM

12D BEAN

12D COTTON

2 A-203

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*ABBOTT D C	ORGANOCHLORINE PESTICIDES IN THE ATMOSPHERIC ENVIRONMENT	THOMSON J
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	HARRISON R B	TATTON J O
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*ABELES F B	CELL-FREE ETHYLENE EVOLUTION FROM ETIOLATED PEA SEEDLINGS	
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1967 A-124	MECHANISM OF ACTION OF ABSCISSION ACCELERATORS	
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	HOLM R E	
*ABELES F R	BIOCHEMICAL PATHWAY OF STRESS-INDUCED ETHYLENE	
1972 A-251	*ABELES A L	
GAHAGAN H F	ABSCISSION: THE ROLE OF AGING	HOLM R E
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1966 A-028 *ABBOTT D C HARRISON R B TATTON J

ENVIRONMENTAL PROTECTION AGENCY

SUBJECT LISTING

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REVIEWS

4520
1 AIP CONSERVATION REPORT REFLECTS NATIONAL CONCERN
D-0068 1965 DIXON J P

1 EFFECT ON PLANTS OF AIR POLLUTANTS DERIVED FROM MOTOR VEHICLE EMISSIONS
D-0070 DAPLEY E P

1 EFFECT OF PEROXYACETYL NITRATE ON PLANTS PHOTOREDUCTIVE REACTIONS AND SUSCEPTIBILITY OF BEAN PLANTS TO PAN
D-0091 1968 DUGGER W M JR

1 REVIEW OF LITERATURE ON HEALTH HAZARDS OF FLUORINE AND ITS COMPOUNDS IN THE MINING AND ALLIED INDUSTRIES
D-0097 1964 DAVENPORT S J

1 AIR POLLUTANTS AND PLANT RESPONSE
D-0102 1967 DAINES P H

1 AIR POLLUTION OXIDANTS THEIR EFFECTS ON METABOLIC PROCESSES IN PLANTS
D-0122 1970 DUGGER W M JR

1 EFFECT OF AIR POLLUTANTS ON VEGETATION
D-0249 1971 DAPLEY E P

1 TOXIC PROPERTIES OF INORGANIC FLUORINE COMPOUNDS CHAPTER 2 EFFECTS ON ANIMALS CHAPTER 3 OTHER EFFECTS
E-0078 1969 EISENBERG P Y

1 MERCURY PROBLEM IN SWEDEN
E-0112 1971 ENHELIN L

1 ANALYTICAL METHODS FOR AIR POLLUTANTS
P-0037 1963 FELDSTEIN M

1 PLANTS AND POLLUTION
P-0079 1970 FOY C L

1 TOXIC EFFECTS OF CADMIUM A REVIEW
S-0105 1971 PLICK D P

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REVIEWS

4520
2 SULFUR DEFICIENCY IN SOILS
C-0012 1945 CROCKER W

2 SULPHUR CONTENT OF PLANTS
P-0066 1935 FRAZER J

METABOLISM

4690
1 DYNAMIC CRITERIA FOR THE EVALUATION OF THE BIOCHEMICAL EFFECTS OF AIR POLLUTANTS
E-0103 1957 ESTES F L

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4710
1 DYNAMIC CRITERIA FOR THE EVALUATION OF THE BIOCHEMICAL EFFECTS OF AIR POLLUTANTS
E-0103 1957 ESTES F L

LEAVES

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2 SOME PHYSIOLOGICAL RESPONSES TO D L ABSCISIN DOPHIN
E-0017 1967 EL ANTABLY H M M

WATER POLLUTION

4890
1 OCCURRENCE OF AIRBORNE LEAD IN SAN FRANCISCO BAY AND ITS RELATION TO ANIMAL DISEASE
C-0214 1970 COOPER R C

1 HORTICULTURE AND POLLUTION
D-0148 1970 DAY B E

1 DISPOSAL OF MERCURY WASTES FROM WATER LABORATORIES
D-0208 1971 DEAN P B

1 YEARLY CIRCULATION OF SULFUR IN NATURE
E-0077 1963 ERIKSSON E

1 MERCURY USES IN CANADA AND THEIR POSSIBLE HAZARDS AS SOURCES OF MERCURY CONTAMINATION
P-0093 1970 YIMPEITE N

1 MERCURY CONTAMINATION OF CANADIAN FISH AND FISH EATING BIRDS
P-0107 1970 YIMPEITE N

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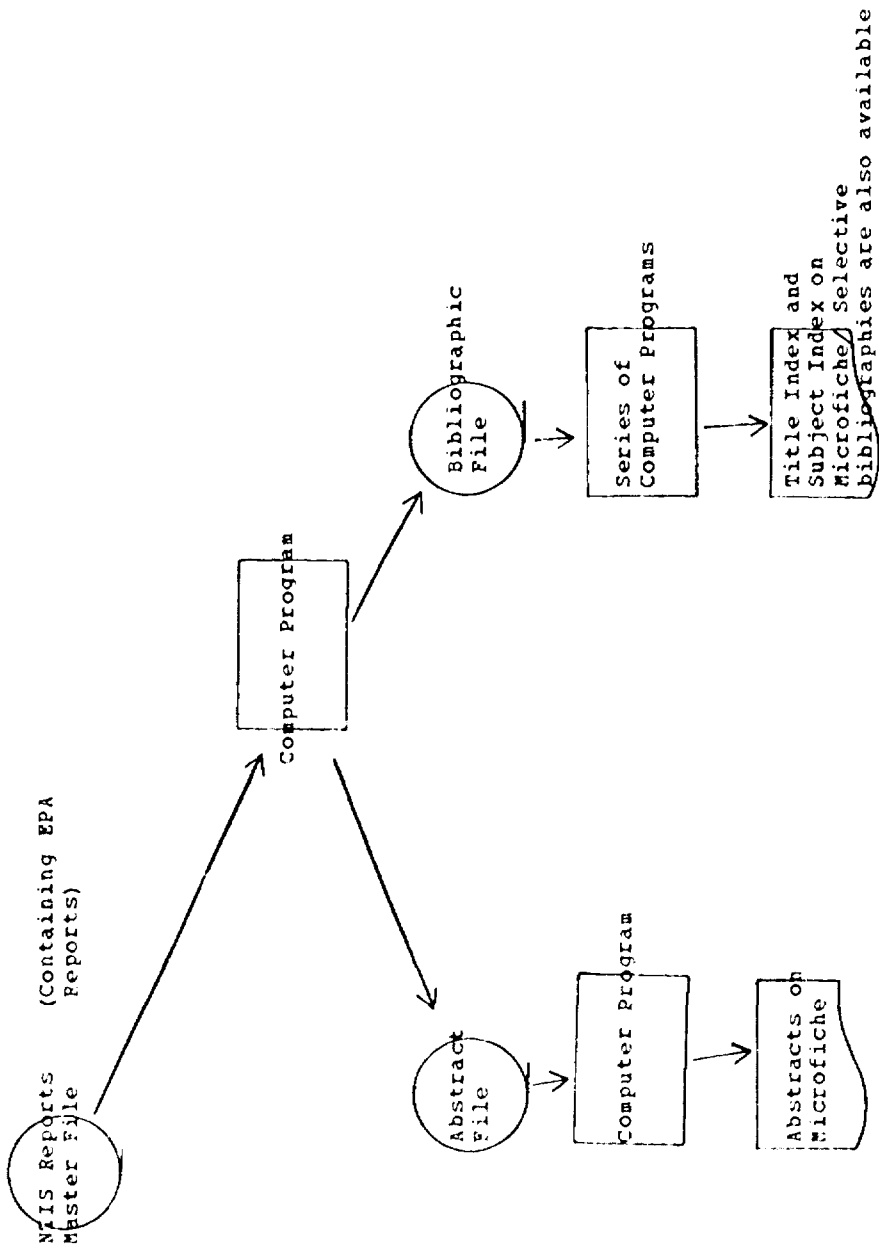
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Plans

EPA will continue to provide this service as long as it remains practical. Further, additional computer programs will be developed providing a greater variety of outputs as needed.

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Document #35 (pages 74-75) is a sample of the title index.
Document #36 (pages 76-77) is a sample of the subject index.
Document #37 (pages 78-79) is a sample of the abstract listing.

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ATMOSPHERIC EMISSIONS FROM THERMAL-PROCESS PHOSPHORIC ACID MANUFACTURE. COOPERATIVE STUDY PROJECT,

PA-190 250 1387A

ATMOSPHERIC EMISSIONS FROM WET-PROCESS PHOSPHORIC ACID MANUFACTURE.

PA-192 222 1387A

AUTOMATIC BEAKER SAMPLE CHANGER. EVALUATION REPT. NO. 1.

PA-207 765 14859A

AVAILABILITY OF LIMESTONES AND DOLOMITES. TASK 1. FINAL REPT..

PA-206 963 RG 64F

AVAILABILITY OF RESIDUAL FUEL OIL. FINAL REPT. JUN-DEC 70 ON TASK 2,

PA-198 817 210138

BACKGROUND INFORMATION FOR PROPOSED NEW-SOURCE PERFORMANCE STANDARDS: STEAM GENERATORS, INCINERATORS, PORTLAND CEMENT PLANTS, NITRIC ACID PLANTS, SULFURIC ACID PLANTS.

PA-202 459 13868A

BACKGROUND INFORMATION-PROPOSED NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: ASBESTOS, BERYLLIUM, MERCURY.

PA-204 976 13868A

BARGED OCEAN DISPOSAL OF WASTES. A REVIEW OF CURRENT PRACTICE AND METHODS OF EVALUATION,

PB-204 868 13868C

BASIC SALINIGEN ION-EXCHANGE RESINS FOR SELECTIVE NITRATE REMOVAL FROM POTABLE AND EFFLUENT WATERS. WATER POLLUTION CONTROL RESEARCH SERIES.

PA-196 735 7C 138

BASIC WASTE CHARACTERISTICS AT WINTER RECREATION AREAS. PROGRESS REPT..

PB-208 437 13868D

BASIN MANAGEMENT FOR WATER REUSE.

PB-209 932 13868D

BASIN MODEL: ECONOMIC SECTOR. WATER POLLUTION CONTROL RESEARCH SERIES.

PA-210 861 13853E

BASIN MODEL: SOCIAL SECTOR. WATER POLLUTION CONTROL RESEARCH SERIES.

PA-210 860 13853E

BASIS FOR ESTABLISHING GUIDES FOR SHORT-TERM EXPOSURES OF THE PUBLIC TO AIR POLLUTANTS.

PB-199 924 6T 138

BATON ROUGE METROPOLITAN AREA AIR POLLUTANT EMISSION INVENTORY,

PA-205 255 13868A

BEAUMONT - PORT ARTHUR METROPOLITAN AREA AIR POLLUTANT EMISSION INVENTORY,

PA-207 685 13868A

BEHAVIOR OF CERTAIN RADIONUCLIDES RELEASED INTO FRESH-WATER ENVIRONMENTS. ANNUAL REPT. 1959-1960,

PA-189 346 18H68

FICIAL USE OF STORM WATER. A SYSTEM STUDY, DESIGN, AND EVALUATION OF THE LOCAL STORAGE, TREATMENT, AND REUSE OF STORM WATER. FINAL REPT.

PA-195 160 13R601

BENEFICIAL USES OF WASTE HEAT - AN EVALUATION.

PA-201 724 13R68D

BENEFITS OF WATER QUALITY ENHANCEMENT.

PA-207 358 13R68D

BERYLLIUM AND AIR POLLUTION: AN ANNOTATED BIBLIOGRAPHY.

PA-198 067 13B6J

BIBLIOGRAPHY OF PUBLISHED LITERATURE ON ASPECTS OF PHYSICAL QUALITY OF HOT ROLLED STEEL STRIP (1960 TO 1970).

PA-197 295 13M69K

BIBLIOGRAPHY. VOLUME III. FABRIC FILTER SYSTEMS STUDY.

PA-200 050 13K7A

BILLINGS. MONTANA AREA AIR POLLUTANT EMISSION INVENTORY.

PA-207 084 13R6HA

BIO-REGENERATED ACTIVATED CARBON TREATMENT OF TEXTILE DYE WASTE WATER. WATER POLLUTION CONTROL RESEARCH SERIES.

PA-203 594 13R68D

BIOCHEMISTRY OF ANAEROBIC DIGESTION. FINAL REPT..

PA-194 655 13M6A

BIOLOGIC EFFECTS OF ATMOSPHERIC POLLUTANTS. FLUORIDES.

PA-207 535 6F 6T

BIOLOGICAL ASPECTS OF LASER RADIATION. A REVIEW OF HAZARDS.

PA-184 003 6E 6R

BIOLOGICAL ASPECTS OF ULTRAVIOLET RADIATION. A REVIEW OF HAZARDS. TECHNICAL REPT..

PA-194 611 6R 57V

BIOLOGICAL EFFECTS AND HEALTH IMPLICATIONS OF MICROWAVE RADIATION.

PA-193 898 6R 57V

BIOLOGICAL EFFECTS OF COPPER AND ARSENIC POLLUTION. FINAL REPT..

PA-201 543 6T 58D

BIOLOGICAL EFFECTS OF EFFLUENT FROM A DESALINATION PLANT AT KEY WEST, FLORIDA. WATER POLLUTION CONTROL SERIES.

PA-195 677 13B6F

BIOLOGICAL EFFECTS OF OIL POLLUTION-BIBLIOGRAPHY. A COLLECTION OF REFERENCES CONCERNING THE EFFECTS OF OIL ON BIOLOGICAL SYSTEMS. WATER POLLUTION CONTROL RESEARCH SERIES.

PA-188 206 6F 13R

ACCIDENTS PB-197 596	Document #36 1386T	CONTROL OF SPILLAGE OF HAZARDOUS POLLUTING SUBSTANCES. WATER POLLUTION CONTROL RESEARCH SERIES.
ACCURACY PB-174 452	180	STANDARDS OF PERFORMANCE FOR FILM BADGE SERVICES.
PB-188 494	1388H	USE OF MATHEMATICAL MODELS IN WATER QUALITY CONTROL STUDIES.
PB-188 494	1388H	USE OF MATHEMATICAL MODELS IN WATER QUALITY CONTROL STUDIES.
PB-190 870	6L 6R	REPORT OF TESTS MADE ON THE WESTINGHOUSE PANORAMIX (TRADE MARK) X-RAY MACHINE.
PB-191 395	14873D	COMPARISON OF MICROWAVE DETECTION INSTRUMENTS.
PB-192 322	6R 57V	EFFECT OF INSTRUMENT AVERAGING TIME ON MICROWAVE POWER DENSITY MEASUREMENTS.
PB-209 267	7B 13B	IMPROVED CHEMICAL METHODS FOR SAMPLING AND ANALYSIS OF GASEOUS POLLUTANTS FROM THE COMBUSTION OF FOSSIL FUELS. VOLUME I. SULFUR OXIDES. FINAL REPT..
ACETATES PB-198 222	11K71Q	DEVELOPMENT OF PHOSPHATE-FREE HOME LAUNDRY DETERGENTS.
PB-198 222	11K71Q	DEVELOPMENT OF PHOSPHATE-FREE HOME LAUNDRY DETERGENTS.
PB-206 237	7A 13B	CONTROLLING FACTORS IN METHANE FERMENTATION. FINAL REPT. 1 SEP 68-31 AUG 69.
PB-206 237	7A 13B	CONTROLLING FACTORS IN METHANE FERMENTATION. FINAL REPT. 1 SEP 68-31 AUG 69.
ACETIC ACID PB-208 433	8H 13B	INVESTIGATIONS CONCERNING PROBABLE IMPACT OF NITRILITRIACETIC ACID ON GROUND WATER. WATER POLLUTION CONTROL RESEARCH SERIES.
PB-209 478	1386T	AICE SURVEY OF USSR AIR POLLUTION LITERATURE. VOLUME XI. A SECOND COMPILATION OF TECHNICAL REPORTS ON THE BIOLOGICAL EFFECTS AND THE PUBLIC HEALTH ASPECTS OF ATMOSPHERIC POLLUTANTS.
ACETOPHENONES PB-201 459	1386E	AICE SURVEY OF USSR AIR POLLUTION LITERATURE. VOLUME VIII. A COMPILATION OF TECHNICAL REPORTS ON THE BIOLOGICAL EFFECTS AND THE PUBLIC HEALTH ASPECTS OF ATMOSPHERIC POLLUTANTS.

ETYLCHOLINESTERASE PB-191 812	70 138	FLUORESCENT PROBES IN THE DEVELOPMENT OF NEW ANALYTICAL METHODS FOR DETECTION OF WATER POLLUTION. ANNUAL REPT. 1 JUN 69-31 MAY 70,
PB-191 812	70 138	FLUORESCENT PROBES IN THE DEVELOPMENT OF NEW ANALYTICAL METHODS FOR DETECTION OF WATER POLLUTION. ANNUAL REPT. 1 JUN 69-31 MAY 70,
ACETYLENE PB-210 707	8H 138	NUTRIENT SOURCES FOR ALGAE AND THEIR CONTROL. WATER POLLUTION CONTROL RESEARCH SERIES,
ACIDIFICATION PB-198 231	1386H	WASTE REDUCTION IN FOOD CANNING OPERATIONS: A STUDY OF FOUR METHODS TO IMPROVE THE QUALITY OR REDUCE THE QUANTITY OF EFFLUENT DISCHARGED BY A FRUIT PROCESSING PLANT. WATER POLLUTION CONTROL RESEARCH SERIES,
PB-198 231	1386H	WASTE REDUCTION IN FOOD CANNING OPERATIONS: A STUDY OF FOUR METHODS TO IMPROVE THE QUALITY OR REDUCE THE QUANTITY OF EFFLUENT DISCHARGED BY A FRUIT PROCESSING PLANT. WATER POLLUTION CONTROL RESEARCH SERIES,
ACIDITY PB-196 113	6M 138	MICROBIOLOGICAL FACTOR IN ACID MINE DRAINAGE FORMATION. II. FURTHER OBSERVATIONS FROM A PILOT PLANT STUDY. WATER POLLUTION CONTROL RESEARCH SERIES,
PB-196 113	6M 138	MICROBIOLOGICAL FACTOR IN ACID MINE DRAINAGE FORMATION. II. FURTHER OBSERVATIONS FROM A PILOT PLANT STUDY. WATER POLLUTION CONTROL RESEARCH SERIES,
PB-206 194	1388I	CONTROL OF MINE DRAINAGE FROM COAL MINE MINERAL WASTES. PHASE I. HYDROLOGY AND RELATED EXPERIMENTS,
PB-206 194	1388I	CONTROL OF MINE DRAINAGE FROM COAL MINE MINERAL WASTES. PHASE I. HYDROLOGY AND RELATED EXPERIMENTS,
PB-208 817	8I 138	MINE SPOIL POTENTIALS FOR WATER QUALITY AND CONTROLLED EROSION.
ACIDS PB-189 233	8I 138	OXYGENATION OF FERROUS IRON: THE RATE-DETERMINING STEP IN THE FORMATION OF ACIDIC MINE DRAINAGE. FINAL PROGRESS REPT. 1 APR 66-31 DEC 68,
PB-189 233	8I 138	OXYGENATION OF FERROUS IRON: THE RATE-DETERMINING STEP IN THE FORMATION OF ACIDIC MINE DRAINAGE. FINAL PROGRESS REPT. 1 APR 66-31 DEC 68,

THE REPORT DETAILS RADIATION PROTECTION RECOMMENDATIONS FOR X-RAY DIFFRACTION AND SPECTROGRAPHIC EQUIPMENT, INCLUDING GUIDELINES FOR ADMINISTRATIVE RESPONSIBILITIES, OPERATING PROCEDURES, PERSONNEL MONITORING, AREA MONITORING, AND SAFETY ENGINEERING. THE REPORT IS DIRECTED TO OPERATORS, ADMINISTRATORS, GOVERNMENTAL HEALTH AGENCIES, AND MANUFACTURERS. (AUTHOR)

6P 5A

J-182 717

THE REPORT DISCUSSES THE EXTENT OF THE USE OF RADIUM IN PRODUCTS AVAILABLE TO THE PUBLIC. IT IS AN ATTEMPT TO CONSOLIDATE INFORMATION PERTAINING TO THESE PRODUCTS SO THAT THEIR POTENTIAL HEALTH IMPLICATIONS CAN BE PUT INTO PERSPECTIVE. A GREATER AWARENESS IS NEEDED TO PROTECT THE PUBLIC FROM POTENTIAL EXPOSURE TO CONSUMER RADIUM. THE EXTENT AND HAZARDS OF THE USE OF THESE PRODUCTS SHOULD BE UNDERSTOOD BY ALL PUBLIC HEALTH AGENCIES. (AUTHOR)

INTERNATIONAL ENVIRONMENTAL REPORTS SYSTEM

ie International Environmental Reports System (Developed for the Office of International Activities)

Purpose and Scope

This system contains summaries of foreign government environmental reports received by EPA through document exchange programs with foreign countries. The resultant computer generated reports serve to alert the agency to major environmental developments around the world. The system produces reports by category (legal, planning and management, scientific and technical, and socio-economic), by country, and by subject (air, water, pesticides, radiation, solid waste, noise, and general).

Data Elements

All of the data is contained in a single file. The data elements include publisher ID number; document title; author; English translation; continent; country; language; date of publication; number of pages; category; document location; subjects; remarks; and the abstract. Document #39 (page 82) is a sample file layout.

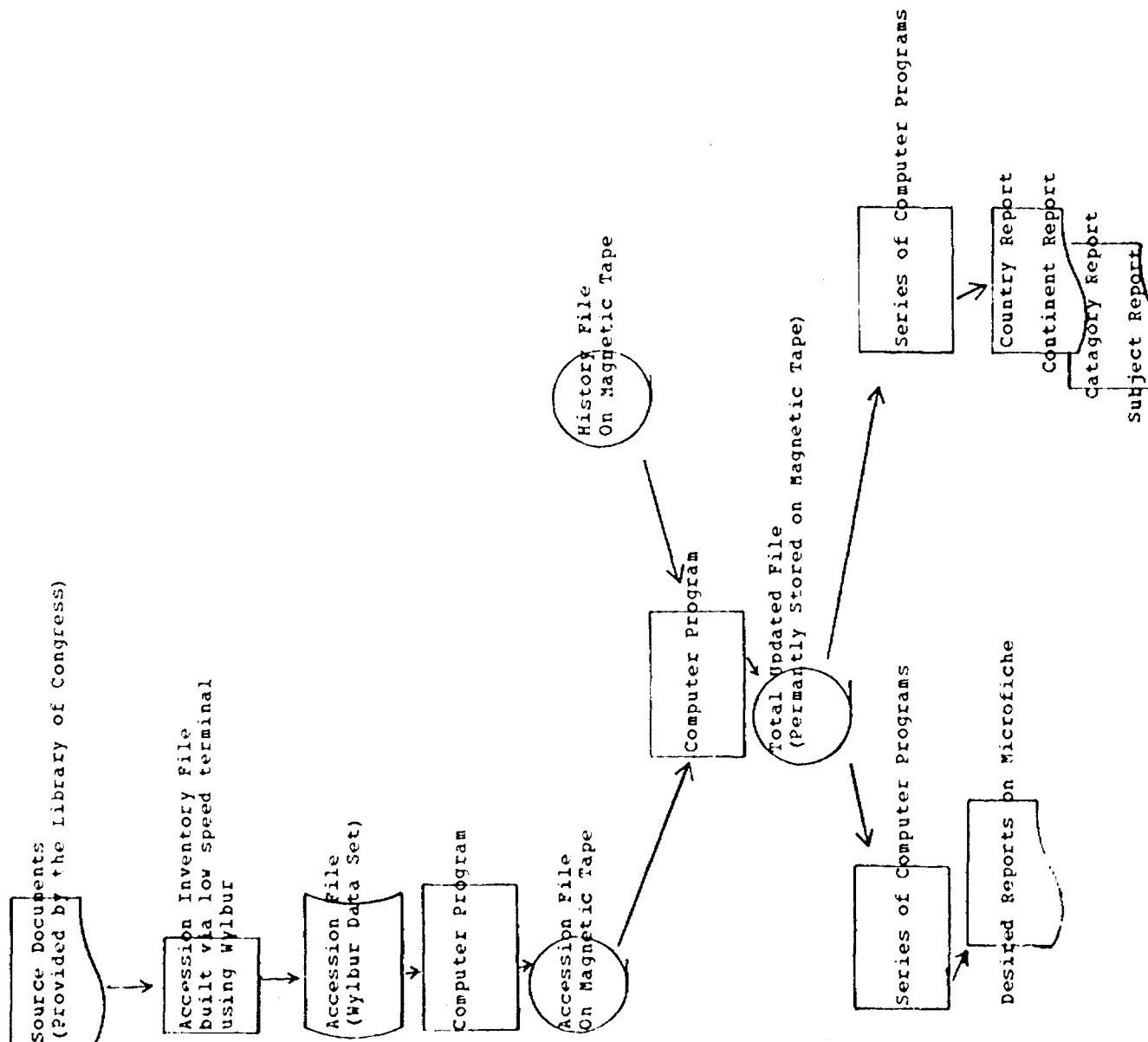
Status

The annotated bibliography containing reports of legal, legislative, and regulatory aspects of environmental quality has been prepared in machine readable form. The computer outputs have been generated and distributed. They are available in hard copy as well as on microfiche.

Plans

The necessary procedures for a continuous updating of the file have been finalized. The system will be expanded to meet the total needs of the functional area as they become defined.

Document #38 (page 81) is a system flow.
Document #40 (pages 83-84) is a sample of the country report.
Document #41 (pages 85-86) is a sample of the subject report.
Document #42 (pages 87-88) is a sample of the category report.
Document #43 (pages 89-90) is a sample of the continent report.



Publisher Id Number	Document Title	Author	Document Source Category	Abstract
00102	REVISED EMISSION STANDARDS FOR SULPHUR OXIDES	DEPT. OF STATE AIRGRAM A-46. AMEMBASSY TOKYO	EPA 1LR	
	ENGLISH	012072 1		

REVISED, MORE STRINGENT STANDARDS FOR SULPHUR DIOXIDES TOOK EFFECT ON JANUARY 5, 1972, REFLECTING THE JAPANESE GOVERNMENT'S DETERMINED EFFORTS SINCE 1969 TO REDUCE THIS MAJOR SOURCE OF AIR POLLUTION. A RECENT SURVEY BY THE GOVERNMENT'S ENVIRONMENTAL PROTECTION AGENCY REVEALED THAT SULPHUR DIOXIDE CONTAMINATION DECREASED DURING FY 1971, ALTHOUGH OTHER AIR POLLUTANTS INCREASED, NOTABLY NITROGEN OXIDES.

Continent Subjects	Country	Language	Number of Pages	Date of Publication	Remarks
00106	GOVERNMENT OF JAPAN ASIA JAPAN GENERAL AIR	ENGLISH	PESTICIDES	000071 20	EPA 1LR ALSO PM
			WATER		
			RADIATION		

THE PRESENT STATE OF MONITORING AND SURVEILLANCE OF ENVIRONMENTAL POLLUTION

TEXT AND TABLES PROVIDE A CONCISE OUTLINE OF THE LEGAL BASIS, JURISDICTION, MONITORING SYSTEMS, AND METHODOLOGY FOR MEASURING POLLUTANTS PRESENT IN AIR, WATER, OCEAN, SOIL, INCLUDING RESIDUE PESTICIDES IN FOODS. IN MONITORING RADIOACTIVE FALLOUT, VARIOUS COUNTERMEASURES HAVE BEEN FORMULATED FOR AN EMERGENCY SITUATION IN WHICH POLLUTION EXCEEDS SAFE LIMITS, BUT TO DATE NO SUCH INCIDENT HAS OCCURRED.

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
COUNTRY/CATEGORY REPORT
PROG: OIA-COUNTRY

COUNTRY:

SWEDEN

LR

PUBLIC HEALTH SERVICE
STOCKHOLM CENTRAL BOARD OF ADMINISTRATION INFO. COMMITTEE EPA
ENGLISH 72 PGS 28 10# 00111
NOISE

SEVERAL ANTINOISE MEASURES HAVE BEEN INITIATED BY STOCKHOLM'S PUBLIC HEALTH COMMITTEE. JET AIRCRAFT NOISE WAS REDUCED BY DESIGNATING NEARBY BROMMA AIRPORT EXCLUSIVELY FOR PISTON-ENGINE AIRCRAFT WHILE DIVERTING JET TRAFFIC TO ARLANDA AIRPORT 40 MILES AWAY. THE REQUIRED WARMUP OF PISTON ENGINES BEFORE TAKEOFF HAS BEEN HELD TO A MINIMUM SINCE SWEDEN'S DOMESTIC AIRLINES WERE URGED TO FIT THEIR AIRCRAFT WITH ENGINE HEATERS. A RECENT ORDINANCE PROHIBITS IDLING OF MOTOR VEHICLE ENGINES OUTDOORS FOR LONGER THAN THREE MINUTES EXCEPT DURING TRAFFIC DELAY. THE SOUND LEVEL FROM A REFUSE COLLECTION TRUCK MUST NOT EXCEED 70 DB (DECIBELS) MEASURED THREE METERS AWAY, AND COMPRESSORS ON CONSTRUCTION SITES MUST NOT EMIT NOISE EXCEEDING 70 DB AT A DISTANCE OF SEVEN METERS.

LR

ENVIRONMENT PLANNING AND CONSERVATION IN SWEDEN
SWEDISH INFORMATION SERVICE EPA
ENGLISH 6/00/72 PGS 4 10# 00118
WATER

RECENT SWEDISH ENVIRONMENTAL LEGISLATION IS HIGHLIGHTED IN THIS PUBLIC INFORMATION BROCHURE. SINCE JANUARY 1, 1972, ALL DUMPING FROM SWEDISH SHIPS AND AIRCRAFT IS PROHIBITED IN TERRITORIAL WATERS AND THE HIGH SEAS. THE LAW ALSO BANS DUMPING BY FOREIGN VESSELS IN SWEDISH TERRITORIAL WATERS, AND IT IS ILLEGAL FOR THEM TO EXPORT WASTES FROM SWEDEN FOR THE PURPOSE OF DUMPING IN THE HIGH SEAS. ANOTHER LAW, EFFECTIVE JUNE 1, 1972, STIPULATES THAT PCB'S AND MATERIALS CONTAINING PCB'S MAY NOT BE MANUFACTURED, SOLD, OR USED WITHOUT LICENSE.

-13-73
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
COUNTRY/CATEGORY REPORT
PROG: OIA-COUNTRY

COUNTRY:

U.S.S.R.

LR

PREVENTION OF OIL POLLUTION IN OCEANS

NINUPAROV S.M.
RUSSIAN
WATER

71 PGS 164
EPA
ID# 00168

THE BOOK DISCUSSES REASONS FOR OCEAN POLLUTION AS A RESULT OF TRANSPORT OPERATIONS AND WAYS TO DECREASE THE HARMFUL EFFECTS OF THIS POLLUTION ON NATURE AND MAN. A SURVEY IS GIVEN OF BASIC INTERNATIONAL AND USSR LEGISLATION FOR PREVENTION OF OIL POLLUTION.

PRACTICAL METHODS APPLIED IN THE USSR FOR DECREASING THE PROBABILITY OF ACCIDENTAL SPILLAGE OF OIL AND FOR PROHIBITING THE DUMPING OF OIL-POLLUTED WATER INTO THE OCEAN ARE PRESENTED. THERE ARE DESCRIPTIONS OF THE MOST EFFECTIVE ARRANGEMENTS AND DEVICES FOR LOCALIZING OIL SPILLS, THEIR REMOVAL, CONSTRUCTIONS FOR UNLOADING TANKERS, AND PURIFICATION.

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
SUBJECT REPORT
PROG: OIA-SUBJECT

GENERAL

EUR

SWEDEN

LR

ENVIRONMENT PROTECTION ACT MARINE DUMPING ACT WITH COMMENTARIES
NAT. ENVIR. PROT. BOARD. EPA
4/00/72 PGS 85 ID# 00129
INFO FOR U.N. CONF. ON ENVIRONMEN
AIR NOISE WATER

THE FIRST PART OF THIS BOOKLET REVIEWS THE SCOPE OF THE ENVIRONMENT PROTECTION ACT OF 1969, A LEGISLATIVE LANDMARK IN SWEDEN'S ANTI-POLLUTION PROGRAM. IT SETS FORTH CRITERIA FOR CONTROL OF AIR AND WATER POLLUTION, NOISE, AND OTHER NUISANCES, AND CITES CASE DECISIONS OF EXAMINING BOARDS TO SHOW THE LAW'S APPLICATION, COMPENSATION GRANTED, OR PENALTIES IMPOSED. UNDER THE ACT, PERSONS OR FIRMS PLANNING TO ENGAGE IN SPECIFIED INDUSTRIAL ACTIVITIES ARE REQUIRED TO APPLY TO A FRANCHISE BOARD FOR A PERMIT TO OPERATE. THIS BOARD MUST BE FULLY APPRAISED OF POSSIBLE POLLUTING EFFECTS OF THE ENTERPRISE, AND WHAT CONTROL DEVICES ARE TO BE USED TO COUNTERACT THE POLLUTION. THE SECOND PART CONTAINS A BRIEF COMMENTARY ON THE MARINE DUMPING PROHIBITION ACT, WHICH CAME INTO FORCE ON JANUARY 1, 1972.

NOISE

APR

SOUTH AFRICA

LR

REPORT ON POLLUTION
THE PLANNING ADVISORY COUNCIL OF THE PRIME MINISTER EPA
3/00/72 PGS 15 ID# 00253
ALSO PM
*GENERAL AIR RADIATION WATER

ASIA

JAPAN

LR

TOKYO FIGHTS POLLUTION AN URGENT APPEAL FOR REPORT
TOKYO METRO. GOV. BUREAU OF GEN. AFFAIRS EPA
3/00/71 PGS 267 ID# 00119
ALSO PM
*GENERAL AIR SOLID WASTE WATER

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
SUBJECT REPORT
PROG: OIA-SUBJECT

NOISE

EUR

NETHERLANDS

LR

ENVIRONMENTAL HEALTH IN THE NETHERLANDS
MINISTRY OF PUBLIC HEALTH AND ENVIRONMENTAL HYGIENE
3/00/72 PGS 60 ID# 00239
*GENERAL WATER AIR SOLID WASTE RADIATION EPA

SWEDEN

LR

ENVIRONMENT PROTECTION ACT MARINE DUMPING ACT WITH COMMENTARIES
NAT. ENVIR. PROT. BOARD.
4/00/72 PGS 85 ID# 00129
INFO FOR U.N. CONF. ON ENVIRONMEN
*GENERAL AIR WATER EPA

SWEDEN

LR

PUBLIC HEALTH SERVICE
STOCKHOLM CENTRAL BOARD OF ADMINISTRATION INFO. COMMITTEE
72 PGS 28 ID# 00111 EPA

SEVERAL ANTINOISE MEASURES HAVE BEEN INITIATED BY STOCKHOLM'S PUBLIC HEALTH COMMITTEE. JET AIRCRAFT NOISE WAS REDUCED BY DESIGNATING NEARBY BROMMA AIRPORT EXCLUSIVELY FOR PISTON-ENGINE AIRCRAFT WHILE DIVERTING JET TRAFFIC TO ARLANDA AIRPORT 40 MILES AWAY. THE REQUIRED WARMUP OF PISTON ENGINES BEFORE TAKEOFF HAS BEEN HELD TO A MINIMUM SINCE SWEDEN'S DOMESTIC AIRLINES WERE URGED TO FIT THEIR AIRCRAFT WITH ENGINE HEATERS. A RECENT ORDINANCE PROHIBITS IDLING OF MOTOR VEHICLE ENGINES OUTDOORS FOR LONGER THAN THREE MINUTES EXCEPT DURING TRAFFIC DELAY. THE SOUND LEVEL FROM A PEPUSE COLLECTION TRUCK MUST NOT EXCEED 70 DB (DECIBELS) MEASURED THREE METERS AWAY, AND COMPRESSORS ON CONSTRUCTION SITES MUST NOT EMIT NOISE EXCEEDING 70 DB AT A DISTANCE OF SEVEN METERS.

ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
CATEGORY/COUNTRY REPORT
PROG: OIA-CATG

CATEGORY:

LP

FUR
ITALY

FACTS ON FILE
VOL. 32, NO. 1645, 5-3
ENGLISH
GENERAL WATER

5/03/72 PGS 35583 LOC
ID# 00138

AN ITALIAN INDUSTRIALIST, ALBERTO REDAELLI, WAS ARRESTED AND JAILED IN MILAN ON MAY 3
AFTER FAILING TO COMPLY WITH AN ORDER TO INSTALL ANTI-POLLUTION DEVICES IN HIS STEEL PLANT.

NETHERLANDS

ENVIRONMENTAL HEALTH IN THE NETHERLANDS
MINISTRY OF PUBLIC HEALTH AND ENVIRONMENTAL HYGIENE
ENGLISH
GENERAL WATER AIR

3/00/72 PGS 60 NOISE
ID# 00239 SOLID WASTE RADIATION

AFTER A SURVEY OF THE GENERAL ENVIRONMENT OF THE NETHERLANDS, THE BOOK TURNS TO SPECIFIC PROBLEMS. THE FIRST OF THESE IS WATER: WATER SUPPLY, USE OF RESOURCES, QUALITY CONTROL, AND WATER POLLUTION. UNDER THE LATTER, IT DESCRIBES SEWAGE DISPOSAL IN THE MAJOR CITIES, NATIONAL STANDARDS AND GOVERNMENTAL ORGANIZATIONS, AND INTERNATIONAL PROBLEMS ARISING IN CONNECTION WITH THE RHINE. THE SECOND POINT IS AIR: IN A SIMILAR FRAMEWORK SUCH ORGANIZATIONS AS THE AIR POLLUTION COUNCIL AND LEGAL MEASURES SUCH AS THE AIR POLLUTION ACT OF 1970 ARE DISCUSSED. RADIATION POLLUTION IS PRESENTED BRIEFLY IN TERMS OF RESEARCH ORGANIZATIONS AND LEGAL MEASURES, AS ARE SOLID WASTES. FOUNDATIONS AND LEGAL MEASURES AGAINST NOISE ARE ALSO GIVEN, IN PARTICULAR THE PUBLIC NUISANCE ACT WHICH AFFECTS ALL THE ABOVE PROBLEMS. THE BOOK THEN PROCEEDS TO DISCUSS PROBLEMS ARISING FROM RECREATION AND HOUSING AND THE POSSIBILITIES OF ANTI-POLLUTION TRAINING AND STUDY.

-13-73
 ENVIRONMENTAL PROTECTION AGENCY
 OFFICE OF INTERNATIONAL ACTIVITIES
 CATEGORY/COUNTRY REPORT
 PROG: DIA-CATS

CATEGORY:

LP

EUR
 SWEDEN

ENVIRONMENT PROTECTION ACT MARINE DUMPING ACT WITH COMMENTARIES
 NAT. ENVIP. PROT. BOARD. EPA
 ENGLISH 4/00/72 PGS 85 ID# 00129
 INFO FOR U.N. CONF. ON ENVIRONMEN NOISE
 GENERAL AIR NOISE WATER

THE FIRST PART OF THIS BOOKLET REVIEWS THE SCOPE OF THE ENVIRONMENT PROTECTION ACT OF 1969, A LEGISLATIVE LANDMARK IN SWEDEN'S ANTI-POLLUTION PROGRAM. IT SETS FORTH CRITERIA FOR CONTROL OF AIR AND WATER POLLUTION, NOISE, AND OTHER NUISANCES, AND CITES CASE DECISIONS OF EXAMINING BOARDS TO SHOW THE LAW'S APPLICATION, COMPENSATION GRANTED, OR PENALTIES IMPOSED. UNDER THE ACT, PERSONS OR FIRMS PLANNING TO ENGAGE IN SPECIFIED INDUSTRIAL ACTIVITIES ARE REQUIRED TO APPLY TO A FRANCHISE BOARD FOR A PERMIT TO OPERATE. THIS BOARD MUST BE FULLY APPRAISED OF POSSIBLE POLLUTING EFFECTS OF THE ENTERPRISE, AND WHAT CONTROL DEVICES ARE TO BE USED TO COUNTERACT THE POLLUTION. THE SECOND PART CONTAINS A BRIEF COMMENTARY ON THE MARINE DUMPING PROHIBITION ACT, WHICH CAME INTO FORCE ON JANUARY 1, 1972.

SWEDEN

ENVIRONMENT PLANNING AND CONSERVATION IN SWEDEN
 SWEDISH INFORMATION SERVICE EPA
 ENGLISH 6/00/72 PGS 4 ID# 00118
 WATER

RECENT SWEDISH ENVIRONMENTAL LEGISLATION IS HIGHLIGHTED IN THIS PUBLIC INFORMATION BROCHURE. SINCE JANUARY 1, 1972, ALL DUMPING FROM SWEDISH SHIPS AND AIRCRAFT IS PROHIBITED IN TERRITORIAL WATERS AND THE HIGH SEAS. THE LAW ALSO BANS DUMPING BY FOREIGN VESSELS IN SWEDISH TERRITORIAL WATERS, AND IT IS ILLEGAL FOR THEM TO EXPORT WASTES FROM SWEDEN FOR THE PURPOSE OF DUMPING IN THE HIGH SEAS. ANOTHER LAW, EFFECTIVE JUNE 1, 1972, STIPULATES THAT PCB'S AND MATERIALS CONTAINING PCB'S MAY NOT BE MANUFACTURED, SOLD, OR USED WITHOUT LICENSE.

3-73 ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
CONTINENT/COUNTRY/CATEGORY REPORT
PROG: OIA-CONTINENT

CONTINENT:

EUR
SWEDEN
LR

ENVIRONMENT PROTECTION ACT MARINE DUMPING ACT WITH COMMENTARIES
NAT. ENVIR. PROT. BOARD.
ENGLISH
INFO FOR U.N. CONF. ON ENVIRONMEN
GENERAL AIR NOISE WATER
4/00/72 PGS 85 EPA
10# 00129

THE FIRST PART OF THIS BOOKLET REVIEWS THE SCOPE OF THE ENVIRONMENT PROTECTION ACT OF 1969, A LEGISLATIVE LANDMARK IN SWEDEN'S ANTI-POLLUTION PROGRAM. IT SETS FORTH CRITERIA FOR CONTROL OF AIR AND WATER POLLUTION, NOISE AND OTHER NUISANCES, AND CITES CASE DECISIONS OF EXAMINING BOARDS TO SHOW THE LAW'S APPLICATION, COMPENSATION GRANTED OR PENALTIES IMPOSED. UNDER THE ACT, PERSONS OR FIRMS PLANNING TO ENGAGE IN SPECIFIED INDUSTRIAL ACTIVITIES ARE REQUIRED TO APPLY TO A FRANCHISE BOARD FOR A PERMIT TO OPERATE. THIS BOARD MUST BE FULLY APPRAISED OF POSSIBLE POLLUTING EFFECTS OF THE ENTERPRISE, AND WHAT CONTROL DEVICES ARE TO BE USED TO COUNTERACT THE POLLUTION. THE SECOND PART CONTAINS A BRIEF COMMENTARY ON THE MARINE DUMPING PROHIBITION ACT, WHICH CAME INTO FORCE ON JANUARY 1, 1972.

SWEDEN
LR

ENVIRONMENT PLANNING AND CONSERVATION IN SWEDEN
SWEDISH INFORMATION SERVICE
ENGLISH
WATER
6/00/72 PGS 4 EPA
10# 00118

RECENT SWEDISH ENVIRONMENTAL LEGISLATION IS HIGHLIGHTED IN THIS PUBLIC INFORMATION BROCHURE. SINCE JANUARY 1, 1972, ALL DUMPING FROM SWEDISH SHIPS AND AIRCRAFT IS PROHIBITED IN TERRITORIAL WATERS AND THE HIGH SEAS. THE LAW ALSO BANS DUMPING BY FOREIGN VESSELS IN SWEDISH TERRITORIAL WATERS, AND IT IS ILLEGAL FOR THEM TO EXPORT WASTES FROM SWEDEN FOR THE PURPOSE OF DUMPING IN THE HIGH SEAS. ANOTHER LAW, EFFECTIVE JUNE 1, 1972, STIPULATES THAT PCB'S AND MATERIALS CONTAINING PCB'S MAY NOT BE MANUFACTURED, SOLD, OR USED WITHOUT LICENSE.

13-73
ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF INTERNATIONAL ACTIVITIES
CONTINENT/COUNTRY/CATEGORY REPORT
PROG: DIA-CONTINENT

CONTINENT:

FUR
SWEDEN
LR

PUBLIC HEALTH SERVICE
STOCKHOLM CENTRAL BOARD OF ADMINISTRATION INFO. COMMITTEE EPA
ENGLISH 72 PGS 28 ID# 00111
NOISE

SEVERAL ANTINOISE MEASURES HAVE BEEN INITIATED BY STOCKHOLM'S PUBLIC HEALTH COMMITTEE. JET AIRCRAFT NOISE WAS REDUCED BY DESIGNATING NEARBY BRONMA AIRPORT EXCLUSIVELY FOR PISTON-ENGINE AIRCRAFT WHILE DIVERTING JET TRAFFIC TO ARLANDA AIRPORT 40 MILES AWAY. THE REQUIRED WARMUP OF PISTON ENGINES BEFORE TAKEOFF HAS BEEN HELD TO A MINIMUM SINCE SWEDEN'S DOMESTIC AIRLINES WERE URGED TO FIT THEIR AIRCRAFT WITH ENGINE HEATERS. A RECENT ORDINANCE PROHIBITS IDLING OF MOTOR VEHICLE ENGINES OUTDOORS FOR LONGER THAN THREE MINUTES EXCEPT DURING TRAFFIC DELAY. THE SOUND LEVEL FROM A REFUSE COLLECTION TRUCK MUST NOT EXCEED 70 DB (DECIBELS) MEASURED THREE METERS AWAY, AND COMPRESSORS ON CONSTRUCTION SITES MUST NOT EMIT NOISE EXCEEDING 70 DB AT A DISTANCE OF SEVEN METERS.

U.S.-S.-R.
LR

PREVENTION OF OIL POLLUTION IN OCEANS
NUNUPAROV S.-Y. EPA
RUSSIAN 71 PGS 164 ID# 00168
WATER

THE BOOK DISCUSSES REASONS FOR OCEAN POLLUTION AS A RESULT OF TRANSPORT OPERATIONS AND WAYS TO DECREASE THE HARMFUL EFFECTS OF THIS POLLUTION ON NATURE AND MAN. A SURVEY IS GIVEN OF BASIC INTERNATIONAL AND USSR LEGISLATION FOR PREVENTION OF OIL POLLUTION. PRACTICAL METHODS APPLIED IN THE USSR FOR DECREASING THE PROBABILITY OF ACCIDENTAL SPILLAGE OF OIL AND FOR PROHIBITING THE DUMPING OF OIL-POLLUTED WATER INTO THE OCEAN ARE PRESENTED. THERE ARE DESCRIPTIONS OF THE MOST EFFECTIVE ARRANGEMENTS AND DEVICES FOR LOCALIZING OIL SPILLS, THEIR REMOVAL, CONSTRUCTIONS FOR UNLOADING TANKERS, AND PURIFICATION.

DOCUMENT CONTROL SYSTEM

Purpose and Scope

This system gathers data on documents not covered by any other library system. A major component of this system is the vast environmental state and local report collection held by the EPA library network. From the resulting master file, various bibliographies can be generated by document title, shelf list number, primary author, corporate author, subject areas, and geographic area.

Data Elements

All of the bibliographic information is contained in a single file format. Data elements include shelf number (which identifies library and document shelf location); document title; up to three authors; date of publication; contract number; two corporate sources; up to five subjects (with subject class numbers); city area; state area; NIS number; original report number; sponsoring report number; and a remarks field. Document #45 (page 94) is a sample file format.

Status

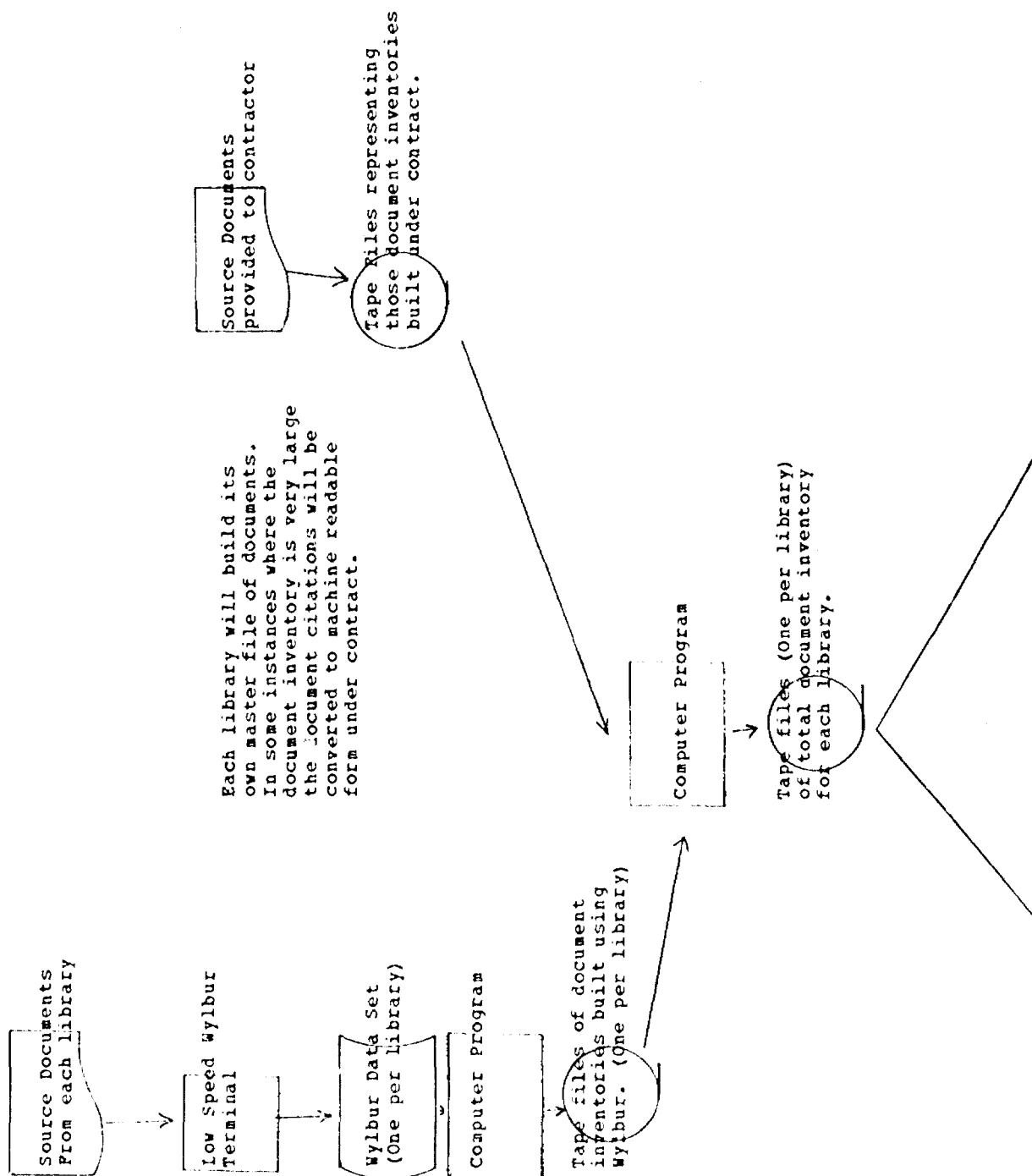
All of the computer programs are operational. Currently, the system has been made available to three EPA libraries. These libraries are now developing the document data base. Because of the large number of reports in each location, the library will be responsible for developing its data base meeting the same exact system specifications.

Plans

As libraries complete their data bases, they will have access to all of the report outputs. As the data base grows, certain combined outputs will be generated. As time allows, all other EPA librarians will be instructed on the system allowing each to build an appropriate master file.

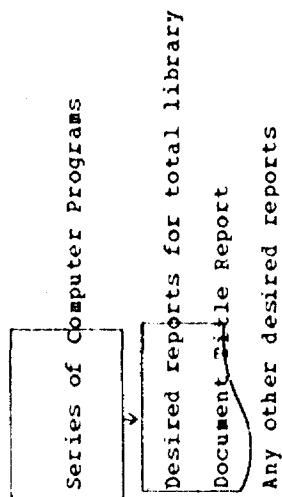
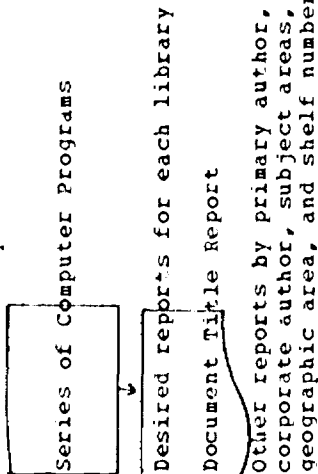
Document #44 (pages 92-93) is a system flow.
 Document #46 (pages 95-96) is a sample of the document title report.
 Document #47 (pages 97-98) is a sample of the primary author report.
 Document #48 (pages 99-100) is a sample of the primary corporate author report.
 Document #49 (pages 101-102) is a sample of the subject report.
 Document #50 (pages 103-104) is a sample of the geographic area report.
 Document #51 (page 105) is a sample of the shelf list report.

System Flow



Document #44 Continued The Document Control System

System Flow



Document #45

Shelf Number	Document ID Number	Title	Author(s)	Publication Date	City Area	State
Corporate Source(s)	Subject Area(s)		Subject Class(s)	Contract Number	(if applicable)	
03B000001		SEVENTH TECHNICAL PROGRESS REPORT		0361		
FAITH W L	RENZETTI N A					
AIR POLLUTION FOUNDATION						
ATMOSPHERIC PHOTOCHEMISTRY	MOTOR VEHICLE EMISSIONS	INSTRUMENTATION			SAN MARINO	CA
		01				
33		THERMAL EFFECTS OF THE SURRY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA	PART III			
03B000002		HARGIS JR W J	0273			
SPEARLS Z A	CHIA S N					
VIRGINIA INSTITUTE OF MARINE SCIENCE						
JAMES RIVER						
INFRA-RED SCANNING						
OP0-4067-4						
33						
03B000003		NUCLEAR POWER PLANT			CLOUCESTER POINT	VA
06						
NTIS Report Number	Original Report Number	Sponsoring Report Number	Remarks Field	(if applicable)		
(if applicable)	(if applicable)	(if applicable)				

61-08-74
 ENVIRONMENTAL PROTECTION AGENCY
 LIBRARY SYSTEM REPORT
 DOCUMENT CONTROL SYSTEM
 PROG: DOCU.TITLE

TITLE SCHEDULE

CURRICULUM ACTIVITIES GUIDE TO WATER POLLUTION AND ENVIRONMENTAL STUDIES V 1-2
 TILTON SCHOOL WATER POLLUTION PROGRAM NH
 GEO AREA TILTON DATE: CONTRACT NO: 1TT1-WP-41-01
 03800009 SUBJ CLASS: 04 WATER POLLUTION
 SUBJ: ENVIRONMENTAL EDUCATION CURRICULUM DEVELOPMENT

ENVIRONMENTAL EDUCATION THE LAST MEASURE OF MAN
 KOHN R F
 UNITED STATES NATIONAL COMMISSION FOR UNESCO
 GEO AREA ATLANTA DATE: 11/71 CONTRACT NO:
 03800006 SUBJ CLASS: 10 STUDY OF HUMAN ECOLOGICAL EFFECTS
 SUBJ: ENVIRONMENTAL EDUCATION HUMAN ECOLOGY

EXPLOITING THE OCEAN TRANSACTIONS OF THE 2 ND ANNUAL HTS CONFERENCE AND EXHIBIT
 MARINE TECHNOLOGY SOCIETY
 GEO AREA WASHINGTON DC DATE: 6/66 CONTRACT NO:
 03800008 SUBJ CLASS: 04 10 OCEAN DUMPING
 SUBJ: MARINE TECHNOLOGY OCEAN EXPLOITATION
 UNDERSEA MINING MINING INDUSTRY

OPTIMIZATION OF WATER RESOURCE SYSTEMS INCORPORATING
 EARTHQUAKE RISK 1973 CONTRIBUTIONS
 DUKE C M JACOBSEN S E
 UNIVERSITY OF CALIFORNIA WATER RESOURCES CENTER
 GEO AREA BOSTON CA DATE: 6/73 CONTRACT NO: UCAL-WRC-W-339
 03800010 SUBJ CLASS: 04 EARTHQUAKES
 SUBJ: WATER RESOURCE SYSTEMS

RESOURCES OF NEW ENGLAND NEW YORK REGION PT 2 CH 1
 NEW ENGLAND NEW YORK INTER-AGENCY COMMITTEE
 GEO AREA BOSTON MA DATE: 3/55 CONTRACT NO:
 03800005 SUBJ CLASS: 04 14 WATER POLLUTION
 SUBJ: NORTHEAST DRAINAGE BASIN

SCIENCE AND TECHNOLOGY AND ITS APPLICATION TO THE PROBLEMS OF POLLUTION
 TRANSPORTATION AND EMPLOYMENT WESTERN STATES CONFERENCE
 FEDERATION OF ROCKY MOUNTAIN STATES INC
 WESTERN GOVERNORS CONFERENCE
 GEO AREA SALT LAKE CITY UT DATE: 3/70 CONTRACT NO:
 03800007 SUBJ CLASS: 13 10 HUMAN ECOLOGY
 SUBJ: HUMAN RESOURCES

TITLE SCHEDULE

-08-74

ENVIRONMENTAL PROTECTION AGENCY
 BRARY SYSTEM REPORT
 DOCUMENT CONTROL SYSTEM
 PROG: DOCU.TITLE

SEVENTH TECHNICAL PROGRESS REPORT

FAITH W L RENZETTI N A
 AIR POLLUTION FOUNDATION
 GEO AREA SAN MARINO CA
 03B00001 SUBJ CLASS: 01
 SUBJ: ATMOSPHERIC PHOTOCHEMISTRY MOTOR VEHICLE EMISSIONS INSTRUMENTATION

33

THERMAL EFFECTS OF THE SURRY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA PART III
 SHEARLS E A CHIA S N HARGIS JR W J
 VIRGINIA INSTITUTE OF MARINE SCIENCE
 GEO AREA CLOUCESTER POINT VA
 03B00002 SUBJ CLASS: 06
 SUBJ: THERMAL EFFECTS JAMES RIVER NUCLEAR POWER PLANT
 INSTRUMENT CALIBRATION INFRA-RED SCANNING
 ORO-4067-4

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TRANSFER OF TECHNOLOGY TO DEVELOPING NATIONS
 PAPERS AND PROCEEDINGS OF A CONFERENCE HELD AT AIRLIE HOUSE APRIL 28 30 1966
 SPENCER D L WORONIAK A
 HOWARD UNIVERSITY
 U S AIR FORCE OFFICE OF AEROSPACE RESEARCH
 GEO AREA WARRENTON VA
 03B00011 SUBJ CLASS: 10
 SUBJ: TECHNOLOGY TRANSFER ECONOMIC THEORY

DATE: 12/66 CONTRACT NO: APOS865

WASTE WATER RENOVATION AND CONSERVATION THE PENNSYLVANIA STATE UNIVERSITY STUDIES NO 23
 PARIZEK R R KARDOS L T SOPPER W E
 PENNSYLVANIA STATE UNIVERSITY
 GEO AREA UNIVERSITY PARK PA
 03B00003 SUBJ CLASS: 04
 SUBJ: WASTE WATER RENOVATION

DATE: 67 CONTRACT NO:

21 ST ANNUAL CONVENTION AMERICAN PUBLIC POWER ASSOCIATION PROCEEDINGS
 AMERICAN PUBLIC POWER ASSOCIATION
 GEO AREA JACKSONVILLE FL
 03B00004 SUBJ CLASS: 04
 SUBJ: POWER INDUSTRY PUBLIC POWER ATOMIC POWER

DATE: 5/64 CONTRACT NO:

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ENVIRONMENTAL PROTECTION AGENCY
LIBRARY SYSTEM REPORT
DOCUMENT CONTROL SYSTEM
PROG: DOCU.AUTH

AUTHOR SCHEDULE

DUKE C M

JACOBSEN S E
OPTIMIZATION OF WATER RESOURCE SYSTEMS INCORPORATING
EARTHQUAKE RISK 1973 CONTRIBUTIONS
UNIVERSITY OF CALIFORNIA WATER RESOURCES CENTER
GEO AREA CA
03B00001C SUBJ CLASS: 04
SUBJ: WATER RESOURCE SYSTEMS EARTHQUAKES
141

DATE: 6/73 CONTRACT NO: UCAL-WRC-W-339

FAITH W L

RENZETTI N A
SEVENTH TECHNICAL PROGRESS REPORT
AIR POLLUTION FOUNDATION
GEO AREA SAN MARINO CA
03B000001 SUBJ CLASS: 01
SUBJ: ATMOSPHERIC PHOTOCHEMISTRY MOTOR VEHICLE EMISSIONS INSTRUMENTATION
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DATE: 3/61 CONTRACT NO:

KOHN R F

ENVIRONMENTAL EDUCATION THE LAST MEASURE OF MAN
UNITED STATES NATIONAL COMMISSION FOR UNESCO
GEO AREA ATLANTA GA
03B000006 SUBJ CLASS: 10
SUBJ: ENVIRONMENTAL EDUCATION STUDY OF HANKIND ECOLOGICAL EFFECTS
HUMAN ECOLOGY

DATE: 11/71 CONTRACT NO:

PRETZER R R

KARDOS L T SOPPER W E
WASTE WATER RENOVATION AND CONSERVATION THE PENNSYLVANIA STATE UNIVERSITY STUDIES NO 23
PENNSYLVANIA STATE UNIVERSITY
GEO AREA UNIVERSITY PARK PA
03B000003 SUBJ CLASS: 04
SUBJ: WASTE WATER RENOVATION

DATE: 67 CONTRACT NO:

SHEARLS E A

CHIA S N HARGIS JR G J
THERMAL EFFECTS OF THE SURRY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA PART III
VIRGINIA INSTITUTE OF MARINE SCIENCE
GEO AREA CLOUCESTER POINT VA
03B000002 SUBJ CLASS: 06
SUBJ: THERMAL EFFECTS JAMES RIVER NUCLEAR POWER PLANT
INSTRUMENT CALIBRATION INFRA-RED SCANNING
33

DATE: 2/73 CONTRACT NO:

ORO-4067-4

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 ENVIRONMENTAL PROTECTION AGENCY
 LIBRARY SYSTEM REPORT
 DOCUMENT CONTROL SYSTEM
 PROG: DOCU.AUTH

AUTHOR SCHEDULE

SPENCER D L WORONIAK A
 TRANSFER OF TECHNOLOGY TO DEVELOPING NATIONS
 PAPERS AND PROCEEDINGS OF A CONFERENCE HELD AT AIRLIE HOUSE APRIL 28 30 1966
 HOWARD UNIVERSITY
 U S AIR FORCE OFFICE OF AEROSPACE RESEARCH
 GEO AREA WARRENTON VA DATE: 12/66 CONTRACT NO: AFOSR66
 038000011 SUBJ CLASS: 10
 SUBJ: TECHNOLOGY TRANSFER ECONOMIC THEORY

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ENVIRONMENTAL PROTECTION AGENCY
LIBRARY SYSTEM REPORT
DOCUMENT CONTROL SYSTEM
PROG: DOCU.CORP

PRIMARY CORPORATE AUTHOR SCHEDULE

AIE POLLUTION FOUNDATION
SEVENTH TECHNICAL PROGRESS REPORT
FAITH W L RENZETTI N A
GEO AREA SAN MARINO CA
C3800C001 SUBJ CLASS: 01 DATE: 3/61 CONTRACT NO:
SUBJ: ATMOSPHERIC PHOTOCHEMISTRY MOTOR VEHICLE EMISSIONS INSTRUMENTATION

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AMERICAN PUBLIC POWER ASSOCIATION
21 ST ANNUAL CONVENTION AMERICAN PUBLIC POWER ASSOCIATION PROCEEDINGS
GEO AREA JACKSONVILLE FL
C390C0004 SUBJ CLASS: 04 DATE: 5/64 CONTRACT NO:
SUBJ: POWER INDUSTRY PUBLIC POWER ATOMIC POWER

FEDERATION OF ROCKY MOUNTAIN STATES INC
SCIENCE AND TECHNOLOGY AND ITS APPLICATION TO THE PROBLEMS OF POLLUTION
TRANSPORTATION AND EMPLOYMENT WESTERN STATES CONFERENCE
WESTERN GOVERNORS CONFERENCE
GEO AREA SALT LAKE CITY UT
C3900C007 SUBJ CLASS: 13 10 DATE: 3/70 CONTRACT NO:
SUBJ: HUMAN RESOURCES HUMAN ECOLOGY

HOWARD UNIVERSITY
TRANSFER OF TECHNOLOGY TO DEVELOPING NATIONS
PAPERS AND PROCEEDINGS OF A CONFERENCE HELD AT AIRLIE HOUSE APRIL 28 30 1966
SPENCER D L WIRONIAK A
U S AIR FORCE OFFICE OF AEROSPACE RESEARCH
GEO AREA WARRENTON VA
C3900C011 SUBJ CLASS: 10 DATE: 12/66 CONTRACT NO: AFOSR66
SUBJ: TECHNOLOGY TRANSFER ECONOMIC THEORY

MARINE TECHNOLOGY SOCIETY
EXPLOITING THE OCEAN TRANSACTIONS OF THE 2 ND ANNUAL MTS CONFERENCE AND EXHIBIT
GEO AREA WASHINGTON DC
C3900C008 SUBJ CLASS: 04 10 DATE: 6/66 CONTRACT NO:
SUBJ: MARINE TECHNOLOGY OCEAN EXPLOITATION OCEAN DUMPING
UNDERSEA MINING MINING INDUSTRY

NEW ENGLAND NEW YORK INTER-AGENCY COMMITTEE
RESOURCES OF NEW ENGLAND NEW YORK REGION PT 2 CH 1
GEO AREA BOSTON MA
C3900C005 SUBJ CLASS: 04 14 DATE: 3/55 CONTRACT NO:
SUBJ: NORTHEAST DRAINAGE BASIN WATER POLLUTION

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ENVIRONMENTAL PROTECTION AGENCY
SECONDARY SYSTEM REPORT
DOCUMENT CONTROL SYSTEM
PROG: DDCU.CORP

PRIMARY CORPORATE AUTHOR SCHEDULE

PENNSYLVANIA STATE UNIVERSITY
WASTE WATER RENOVATION AND CONSERVATION THE PENNSYLVANIA STATE UNIVERSITY STUDIES NO 23
PARIZEK R R KARDOS L T SOPPER W E
GEO AREA UNIVERSITY PARK PA DATE: 67 CONTRACT NO:
038C0C003 SUBJ CLASS: 04 RENOVATION
SUBJ: WASTE WATER

TILTON SCHOOL WATER POLLUTION PROGRAM
CURRICULUM ACTIVITIES GUIDE TO WATER POLLUTION AND ENVIRONMENTAL STUDIES V 1-2
GEO AREA TILTON NH DATE: CONTRACT NO: 1TT1-WP-41-01
0380J0009 SUBJ CLASS: 04 WATER POLLUTION CURRICULUM DEVELOPMENT
SUBJ: ENVIRONMENTAL EDUCATION

UNITED STATES NATIONAL COMMISSION FOR UNESCO
ENVIRONMENTAL EDUCATION THE LAST MEASURE OF MAN
KOHN R F GA DATE: 11/71 CONTRACT NO:
GEO AREA ATLANTA SUBJ CLASS: 10 ECOLOGICAL EFFECTS
038C0C006 SUBJ: ENVIRONMENTAL EDUCATION STUDY OF MANKIND
SUBJ: HUMAN ECOLOGY

UNIVERSITY OF CALIFORNIA WATER RESOURCES CENTER
OPTIMIZATION OF WATER RESOURCE SYSTEMS INCORPORATING
EARTHQUAKE RISK 1973 CONTRIBUTIONS
DUKE C W JACOBSEN S F CA DATE: 6/73 CONTRACT NO: UCAL-WRC-W-339
GEO AREA SUBJ CLASS: 04 EARTHQUAKES
038C0C010 SUBJ: WATER RESOURCE SYSTEMS

VIRGINIA INSTITUTE OF MARINE SCIENCE
THERMAL EFFECTS OF THE SURRY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA PART III
SHEARIS E A CHIA S N HARGIS JR W J
GEO AREA CLOUCESTER POINT VA DATE: 2/73 CONTRACT NO:
038C0C002 SUBJ CLASS: 06 NUCLEAR POWER PLANT
SUBJ: THERMAL EFFECTS JAMES RIVER
INSTRUMENT CALIBRATION INFRA-RED SCANNING
ORO-4067-4

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LIBRARY SYSTEM REPORT
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PROG: DOCU.SUBJNO

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ATOMIC POWER 03B000004	04	21 ST ANNUAL CONVENTION AMERICAN PUBLIC POWER ASSOCIATION PROCEEDINGS	
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HUMAN RESOURCES 03B000007	13 10	SCIENCE AND TECHNOLOGY AND ITS APPLICATION TO THE PROBLEMS OF POLLUTION TRANSPORTATION AND EMPLOYMENT WESTERN STATES CONFERENCE	

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NUCLEAR POWER PLANT 03B000002	06	THERMAL EFFECTS OF THE SURRY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA	PART III
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POWER INDUSTRY 03B000004	04	21 ST ANNUAL CONVENTION AMERICAN PUBLIC POWER ASSOCIATION PROCEEDINGS	

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PROG: DOCU.GEO

GEOGRAPHIC SCHEDULE

CA

OPTIMIZATION OF WATER RESOURCE SYSTEMS INCORPORATING

EARTHQUAKE RISK 1973 CONTRIBUTIONS
DUKE C H JACOBSEN S E
UNIVERSITY OF CALIFORNIA WATER RESOURCES CENTER
DATE: 6/73 CONTRACT NO: UCAL-WRC-W-339
03B000010 SUBJ CLASS: 04 EARTHQUAKES
SUBJ: WATER RESOURCE SYSTEMS 141

SAN MARINO

SEVENTH TECHNICAL PROGRESS REPORT

FAITH W L RENZETTI N A

AIR POLLUTION FOUNDATION

DATE: 3/61

CONTRACT NO:

SUBJ CLASS: 01

SUBJ: ATMOSPHERIC PHOTOCHEMISTRY

MOTOR VEHICLE EMISSIONS

INSTRUMENTATION

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DC

WASHINGTON

EXPLOITING THE OCEAN TRANSACTIONS OF THE 2 ND ANNUAL MTS CONFERENCE AND EXHIBIT

MARINE TECHNOLOGY SOCIETY

DATE: 6/66

03B000008

SUBJ: MARINE TECHNOLOGY

UNDERSEA MINING

SUBJ CLASS: 04 10

OCEAN EXPLOITATION

MINING INDUSTRY

OCEAN DUMPING

FL

JACKSONVILLE

21 ST ANNUAL CONVENTION AMERICAN PUBLIC POWER ASSOCIATION PROCEEDINGS

AMERICAN PUBLIC POWER ASSOCIATION

DATE: 5/64

03B000004

SUBJ: POWER INDUSTRY

SUBJ CLASS: 04

PUBLIC POWER

ATOMIC POWER

GA

ATLANTA

ENVIRONMENTAL EDUCATION THE LAST MEASURE OF MAN

KOHN R F

UNITED STATES NATIONAL COMMISSION FOR UNESCO

DATE: 11/71

03B000006

SUBJ: ENVIRONMENTAL EDUCATION

HUMAN ECOLOGY

CONTRACT NO:

SUBJ CLASS: 10

STUDY OF HANKIND

ECOLOGICAL EFFECTS

1-08-74 ENVIRONMENTAL PROTECTION AGENCY GEOGRAPHIC SCHEDULE
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PROG: DOCU.GEO

MA BOSTON RESOURCES OF NEW ENGLAND NEW YORK REGION PT 2 CH 1

NEW ENGLAND NEW YORK INTER-AGENCY COMMITTEE
DATE: 3/55 CONTRACT NO:
038000005 SUBJ CLASS: 04 14
SUBJ: NORTHEAST DRAINAGE BASIN WATER POLLUTION

NH TILTON CURRICULUM ACTIVITIES GUIDE TO WATER POLLUTION AND ENVIRONMENTAL STUDIES V 1-2

TILTON SCHOOL WATER POLLUTION PROGRAM CONTRACT NO: 1TT1-WP-41-01
DATE: SUBJ CLASS: 04
038000009 SUBJ: ENVIRONMENTAL EDUCATION WATER POLLUTION CURRICULUM DEVELOPMENT

PA UNIVERSITY PARK WASTE WATER RENOVATION AND CONSERVATION THE PENNSYLVANIA STATE UNIVERSITY STUDIES NO 23
PARIZEK R R KARDOS L T SOPPER W E
DATE: 67 CONTRACT NO:
038000003 SUBJ CLASS: 04
SUBJ: WASTE WATER RENOVATION

UT SALT LAKE CITY SCIENCE AND TECHNOLOGY AND ITS APPLICATION TO THE PROBLEMS OF POLLUTION
TRANSPORTATION AND EMPLOYMENT WESTERN STATES CONFERENCE

FEDERATION OF ROCKY MOUNTAIN STATES INC
WESTERN GOVERNORS CONFERENCE
DATE: 3/70 CONTRACT NO:
038000007 SUBJ CLASS: 13 10
SUBJ: HUMAN RESOURCES HUMAN ECOLOGY

VA CLOUCESTER POINT THERMAL EFFECTS OF THE SURRY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA PART III
SHEARLS E A CHIA S N HARGIS JR W J
VIRGINIA INSTITUTE OF MARINE SCIENCE
DATE: 2/73 CONTRACT NO:
038000002 SUBJ CLASS: 06
SUBJ: THERMAL EFFECTS JAMES RIVER NUCLEAR POWER PLANT
INSTRUMENT CALIBRATION INFRA-RED SCANNING
ORO-4067-4

SHELF LISTING

ENVIRONMENTAL PROTECTION AGENCY
LIBRARY SYSTEM REPORT
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PROG: DOCU.SHELF

03B000001	SEVENTH TECHNICAL PROGRESS REPORT FAITH W L AIR POLLUTION FOUNDATION	DATE: 3/61 PB NO:	REPORT NO: 33	
03B000002	THERMAL EFFECTS OF THE SURREY NUCLEAR POWER PLANT ON THE JAMES RIVER VIRGINIA PART III SHEARIS E A VIRGINIA INSTITUTE OF MARINE SCIENCE	DATE: 2/73 PB NO:	REPORT NO: 33	ORO-4067-4
03B000003	WASTE WATER RENOVATION AND CONSERVATION THE PENNSYLVANIA STATE UNIVERSITY STUDIES NO 23 PARIZEK R R PENNSYLVANIA STATE UNIVERSITY	DATE: 67 PB NO:	REPORT NO:	
03B000004	21 ST ANNUAL CONVENTION AMERICAN PUBLIC POWER ASSOCIATION PROCEEDINGS AMERICAN PUBLIC POWER ASSOCIATION	DATE: 5/64 PB NO:	REPORT NO:	
03B000005	RESOURCES OF NEW ENGLAND NEW YORK REGION PT 2 CH 1 NEW ENGLAND NEW YORK INTER-AGENCY COMMITTEE	DATE: 3/55 PB NO:	REPORT NO:	
03B000006	ENVIRONMENTAL EDUCATION THE LAST MEASURE OF MAN KOHN R F UNITED STATES NATIONAL COMMISSION FOR UNESCO	DATE: 11/71 PB NO:	REPORT NO:	
03B000007	SCIENCE AND TECHNOLOGY AND ITS APPLICATION TO THE PROBLEMS OF POLLUTION TRANS TATION AND EMPLOYMENT WESTERN STATES CONFERENCE FEDERATION OF ROCKY MOUNTAIN STATES INC	DATE: 3/70 PB NO:	REPORT NO:	
03B000008	EXPLOITING THE OCEAN TRANSACTIONS OF THE 2 ND ANNUAL MTS CONFERENCE AND EXHIBIT MARINE TECHNOLOGY SOCIETY	DATE: 6/66 PB NO:	REPORT NO:	
03B000009	CURRICULUM ACTIVITIES GUIDE TO WATER POLLUTION AND ENVIRONMENTAL STUDIES V 1-2 TILTON SCHOOL WATER POLLUTION PROGRAM	DATE: PB NO:	REPORT NO:	
03B000010	OPTIMIZATION OF WATER RESOURCE SYSTEMS INCORPORATING EARTHQUAKE RISK 1973 CONTRIBUTIONS DUKE C M UNIVERSITY OF CALIFORNIA WATER RESOURCES CENTER	DATE: 6/73 PB NO:	REPORT NO: 141	
03B000011	TRANSFER OF TECHNOLOGY TO DEVELOPING NATIONS PAPERS AND PROCEEDINGS OF A CONFERENCE HELD AT AIRLIE HOUSE APRIL 28 30 1966 SPENCER D L HOWARD UNIVERSITY	DATE: 12/66 PB NO:	REPORT NO:	

em Comparisons

This table briefly compares some of the common aspects of the library systems.

The operation cost comparisons are based on the execution of a computer program that generates a standard report.

In all instances, the hardware is NIH's IBM 370/165's and the software is the Inquiry and Reporting System language.

The System	.System Development .Time *	.Comp' er Program .Executed	.Execution Time (CPU SEC) .Dollar Cost/Turn Around	.Size of Master .File	.Type of Storage
The Journal System	.160 Working Hours	.Generates a Journal .Inventory report for .a single library- .HQ's Library in this .execution.	.4.84 sec/\$7.25/ .2 hr turn around**	.Journal holdings .file-6262 120 ch .records/Journal .title file-2656 .120 ch records	.On-line Disk***
Hard Bound Book System	.360 Working Hours	.Generates a subject .Report for the total .Library network.	.19.65 sec/\$32.62/ .2 hr turn around**	.Book holdings file .of 9098 130 ch .records/Book title .file of 2667 130 ch .records.	.On-line disk***
The Circulation System	.120 Working Hours	.Generates a daily .Report (alpha by .title) of all library .material on loan.	.2.31 sec/\$3.12/ .2 hr turn around**	.Circulation master .containing 589 .120 ch records.	.On-line disk
The Pesticides Literature Search System	.360 Working Hours	.Generates an author .Report representing .all citations to date..	.10.53 sec/\$15.36/ .2 hr turn around**	.Single Master file .containing 1000 .900 ch records. (This is a sample of the total file.)	.Magnetic Tape

* The total combined time of the functional and technical staffs necessary to develop the application to an operational status using test files.

** Under normal conditions, a lower job class priority would have been used (12-14 hour turn around). A 20% discount would have resulted.

***The permanent storage used is magnetic tape. The cost of on-line storage is approximately 1.2 cents to 2 cents/day/track depending on whether public or private disk space is used.

Item Comparisons Continued

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The System	.System Development .Time *	.Computer Program .Executed	.Execution Time (CPU SEC) .Dollar Cost/Turn Around	.Size of Master .File	.Type of Storage
The Ecological Air Pollutant Literature Search System	.280 Working Hours	.Generates an author report representing all citations to date..	.3.82 sec/\$4.52 .12-14 hr turn around	.Single Master file containing 500 1080 ch records. (This is a sample of the total file.)	.Magnetic Tape
The EPA Reports Reporting System	.560 Working Hours	.Generates an abstract report for the total master file.	.17.06 sec/\$18.95/ .12-14 hr turn around	.Single Master file containing 1231 4800 ch records.	.Magnetic Tape
International Environmental Reports System	.280 Working Hours	.Generates a multiple subject index (with abstracts) for the total master file.	.9.54 sec/\$11.53/ .12-14 hr turn around	.Single Master file containing 518 1600 ch records.	.Magnetic Tape
The EPA Document Control System	.160 Working Hours	.Not applicable as the system is developed only to the test phase.	.Not applicable as as the system is developed only to the test phase.	.Single Master file containing 900 ch records.	.Magnetic Tape

* The total combined time of the functional and technical staffs necessary to develop the application to an operational status using test files.

** Under normal conditions, a lower job class priority would have been used (12-14 hour turn around). A 20% discount would have resulted.

***The permanent storage used is magnetic tape. The cost of on-line storage is approximately 1.2¢ to 2¢/day/track depending on whether public or private disk space is used.